

## DANI GC Columns and Consumables

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 Астрахань (8512)99-46-04  
 Барнаул (3852)73-04-60  
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Сочи (862)225-72-31  
 Ставрополь (8652)20-65-13  
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 Тверь (4822)63-31-35  
 Томск (3822)98-41-53  
 Тула (4872)74-02-29  
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**DANI Worldwide Distributors**


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## Our Mission

**Satisfy customers' expectations**, by offering outstanding products and performances

**Provide total solutions** ranging from implementation of customized systems to technical support, customer care and technical trainings

**Assure high quality** of the products as a result of continuous investment in advanced technology

## History

DANI Instruments was established in 1975 by a group of experts in the field of analytical instrumentation who have devoted their knowledge to the new gas chromatographic technique, cooperating with the most prestigious Italian scientific institutes.

DANI has always used innovative technology in planning systems and products specializing in sample handling techniques. The Static Head Space Sampler is considered the most outstanding product which covers two thirds of the total market.

## Milestones

1975: First DANI Gas Chromatograph	GC 3200
1977: First DANI Liquid Autosampler	ALS 3641
First DANI Head Space Sampler	HSS 3640
First DANI Capillary GC	GC 3900
1981: Symposium of Hindelang - Presentation of Programmable Temperature Vaporizer PTV	
1985: Manufacturing Agreement with Hewlett Packard for Head Space Sampler HSS 39.50 (HP19395A)	
1987: First DANI Thermal Desorber	STD 33.50
1989: Gas Chromatograph	GC 8610
1990: First DANI Natural Gas Analyzer	PGC 90.25
1993: Head Space Sampler	HSS 86.50
1996: Digital Gas Chromatograph	GC1000
1998: Environmental Line:	THM, TNMH, BTX Analyzers
2000: Digital Gas Chromatograph Head Space Sampler	GC1000 2 <sup>nd</sup> Series HSS 86.50 2 <sup>nd</sup> Series
2002: Thermal Desorber	STD1000
2006: New <i>Master</i> Line	MASTER GC, MASTER AS, MASTER TD
2007: New GC Capillary Columns Line	DN Series



## Facilities



**Headquarters**  
viale Brianza, 87 20093 Cologno Monzese MI ITALY



**Manufacturing Site – Pavia - ITALY**



**Software development and  
manufacturing site**  
Contone - Switzerland

## Our Strengths

- Highly qualified and experienced staff
- Very reliable, versatile and easy to use instruments
- Excellent analytical qualities, combined with an up-to-date and compact electronic
- Total solutions ranging from customer care, technical support and training programs
- Well established international sales and service network of accredited world wide distributors
- Flexibility as well as compliance with the higher standards and ISO9001 conformity



DANI's new line of capillary GC columns provide the best performance you demand for your general purpose, special purpose GC/MS or FAST GC applications.

DANI GC Capillary Columns are manufactured from the highest quality polyamide coated synthetic fused silica. They are mounted on a rugged wear-resistant cage.

All Capillary Columns are individually tested and flame sealed. In each column you can find a Test Certificate performed with a Certified Grob Mixture and instructions for installation and Grob Test performance.



### How to select a GC Capillary Column

**Internal diameter** - Selection is based on sample concentration and instrumentation.

**Film thickness** - Film thickness has a direct effect on retention times, the thicker the film, the higher the retention times.

**Column Length** - The column length affects both the resolution and the analysis time. A longer column provides better resolution, but a double column length will double the analysis time (isothermal conditions).

**Stationary Phase** - The stationary phase selection must take into account the affinity towards the components to be separated.



To order **STANDARD** DANI GC Capillary column please specify only the

### Part Number

Stationary Phase	Maximum Temperature		Part Number	Length		
Internal Diameter	ID	Film	Max Temp	Code	Chroma	Chromatogram Number
DN-1	0.25mm	0.15µm	350°C	9414.116 039		
	0.25mm	0.25µm	350°C	9414.116 040		
	0.25mm	0.45µm	330°C	9414.116 041		
	0.25mm	1.00µm	330°C	9414.116 042		
	0.25mm	1.50µm	330°C	9414.116 043		
	0.32mm	0.15µm	350°C	9414.116 044	004	
	0.32mm	0.25µm	350°C	9414.116 045		
	0.32mm	0.45µm	330°C	9414.116 046		
	0.32mm	1.00µm	330°C	9414.116 047		
	0.32mm	1.50µm	330°C	9414.116 048		
	0.32mm	3.00µm	320°C	9414.116 049		
	0.32mm	5.00µm	320°C	9414.116 050	001	
	0.53mm	0.15µm	350°C	9414.116 051		
	0.53mm	0.25µm	350°C	9414.116 052		
	0.53mm	0.45µm	330°C	9414.116 053		
	0.53mm	1.00µm	330°C	9414.116 054		
	0.53mm	1.50µm	330°C	9414.116 055		
	0.53mm	3.00µm	320°C	9414.116 056		
	0.53mm	5.00µm	320°C	9414.116 057		

**On request**  
DANI Instruments  
can supply GC Capillary columns with  
length, internal diameter and stationary phase  
other than what listed in this Catalog



To order **CUSTOM** DANI GC Capillary column please specify

**Stationary Phase + Internal Diameter + Length + Film Thickness**



## DANI GC Capillary Column Installation instructions



A SCENT  
OF  
FUTURE

Preliminary Check	<p>The carrier gas must be pure and free from O<sub>2</sub> traces or other contaminants, to prevent column degradation, base line fluctuations, increased bleeding and because, with some detectors, they cause ghost peaks. The carrier gas purity requirements can be found in the GC operating manuals. It is advisable to use filters on carrier and make-up gas lines: traps for moisture, oxygen and hydrocarbons with indicators, are available on the market and in this catalogue.</p> <p>Don't install the column prior to injector periodic maintenance. Check that the liner and the glass wool inside. Check the septum.</p>	<p>Check the system for leaks. This is <b>very important</b> because in case of leaks in the sample path, an unknown and non-repeatable fraction of the sample doesn't reach the detector, the peak areas also become non-repeatable and the calibration files useless.</p> <p>Some gas chromatographs have an automatic leak test function. You can consult your GC operating manual and follow the instructions to perform the leak test.</p>												
Installation at the injector	<p>When a column is new, there is no stationary phase in its ends and the ends are flame sealed. Cut 2-3cm of both ends by using a ceramic scoring wafer or a special cutter. Try to make a clean square cut. Don't install the column if the cut is not perfect, otherwise you risk getting bad peak shapes. Even if the column is not new, it could be necessary to cut a piece of it, especially from the injector side, where it is likely to be dirty or burned. Select the correct ferrule for your column diameter. Vespel® – graphite ferrules are highly recommended instead of graphite ones. The part numbers of nuts, washers and ferrules can be found in this catalogue. It is advisable to consult your GC operating manual for the correct column insertion distance in the injector. Refer to GC1000 and MASTER GC operating manuals and find a complete and illustrated description of the procedure and the parts mentioned. Even in case of other GC manufacturers, the information can be usually found in the operating manual.</p>	<p>Switch on the FID and perform the Grob test following the Instructions on CAPILLARY COLUMN TEST CHROMATOGRAM inserted in the column package.</p>												
Carrier gas flow check	<p>Turn on the carrier gas, select flow control mode for carrier gas and set the correct flow for your column. See the table below.</p> <table><thead><tr><th>Column diameter</th><th>Carrier gas flow</th></tr></thead><tbody><tr><td>0.05mm</td><td>0.3mL/min</td></tr><tr><td>0.10mm</td><td>0.5mL/min</td></tr><tr><td>0.25mm</td><td>1-2mL/min</td></tr><tr><td>0.32mm</td><td>2-4mL/min</td></tr><tr><td>0.53mm</td><td>5-10mL/min</td></tr></tbody></table> <p>To operate without carrier gas damages irreparably the column. Check the carrier gas is exiting the column by dipping its end into a vial with a solvent, acetone for instance, and observing a stream of bubbles. In case there is not a flow, check the column for possible damages and the connection at the injector for leak by using a leak check solution.</p>	Column diameter	Carrier gas flow	0.05mm	0.3mL/min	0.10mm	0.5mL/min	0.25mm	1-2mL/min	0.32mm	2-4mL/min	0.53mm	5-10mL/min	<p>When the column is not in use, it is advisable to plug the ends with rubber septa or close them by a butane-oxygen flame, possibly with the column filled with inert gas.</p>
Column diameter	Carrier gas flow													
0.05mm	0.3mL/min													
0.10mm	0.5mL/min													
0.25mm	1-2mL/min													
0.32mm	2-4mL/min													
0.53mm	5-10mL/min													
Column conditioning	<p>DANI columns have been pre-conditioned, however, to get excellent performances and to remove any possible contaminants coming from the liner septum and column handling, we recommend conditioning again the column for 4-6 hours, with the detector end uninstalled. Set the injector 20°C above the operating temperature. Set a purge flow. Set <i>Split</i> injection mode and a split ratio of 1:20. For most columns the following temperature program is suggested:</p> <p><b>Initial temperature :</b> 40-60°C <b>Temperature rate :</b> 2-4°C/min <b>Final temperature :</b> 20°C above the operating temperature without exceeding the maximum allowed for the column.</p> <p>When the operating temperature is the maximum allowed, a longer conditioning time may be necessary.</p>	<p>In case of loss of efficiency, peak tailing etc. probably due to contamination, the column can be washed. <b>Try first</b> to recover column performances by conditioning again the column <b>according to the above temperature program</b>; only in case it is not enough, try to wash with a solvent. Using nitrogen or another inert gas, fill completely the column from the end which was connected to the detector, and then drain it. Usually a series of solvents with different polarity is used, for instance in order: hexane, methylene chloride, methanol, methylene chloride, hexane.</p> <p>Dry with nitrogen and condition again as described above. Only bonded and cross-linked columns are solvent resistant. <b>Don't wash columns that are not bonded and cross-linked with a solvent.</b></p>												
Installation at the detector	<p>Don't install the column into the detector before the end of conditioning.</p> <p>The installation procedure at the detector is the same as for the injector, only the insertion distance is different: consult the operating manual of your gas chromatograph. Respect the manufacturer's instructions: If the distance from the nozzle is too big, the make-up gas can't work properly and the peaks shape can be compromised; even in case the column exits the nozzle, the make-up gas can't improve peaks shape, the column burns when there is a flame and the baseline becomes noisy.</p>	<p>When analysing dirty samples, the use of a pre-column (retention gap) is advisable: it retains non-volatile compounds and protect the analytical column from contamination. The pre-column is connected to the column by means of a press – fit union.</p> <p>In case of efficiency loss or peak tailing, replace the pre-column.</p>												



## Standard Phase Cross Reference

Composition	DANI	Similar Phases	Page
100% Dimethylpolysiloxane	<b>DN-1</b>	DB <sup>TM</sup> -1, Rtx <sup>TM</sup> -1, SPB <sup>TM</sup> -1, SPB <sup>TM</sup> -Sulfur, SP <sup>TM</sup> -2100, HP <sup>TM</sup> -1, HP <sup>TM</sup> -101, ULTRA <sup>TM</sup> -1, BP <sup>TM</sup> -1, CP-Sil <sup>TM</sup> 5 CB, 007 <sup>TM</sup> -1, OV <sup>TM</sup> -1, SE <sup>TM</sup> -30, DC <sup>TM</sup> -200, RSL <sup>TM</sup> -150, RSL <sup>TM</sup> -160, PE-1, ZB-1, AT <sup>TM</sup> -1, EC <sup>TM</sup> -1	
100% Dimethylpolysiloxane	<b>DN-1 MS</b>	DB <sup>TM</sup> -1ms, HP <sup>TM</sup> -1ms, Rtx <sup>TM</sup> -1ms, CP-Sil <sup>TM</sup> 5 CB low bleed/ms, AT <sup>TM</sup> -1ms	
100% Dimethylpolysiloxane	<b>DN-1 FAST</b>	DB <sup>TM</sup> -1, Rtx <sup>TM</sup> -1, SPB <sup>TM</sup> -1, SPB <sup>TM</sup> -Sulfur, SP <sup>TM</sup> -2100, HP <sup>TM</sup> -1, HP <sup>TM</sup> -101, ULTRA <sup>TM</sup> -1, BP <sup>TM</sup> -1, CP-Sil <sup>TM</sup> 5 CB, 007 <sup>TM</sup> -1, OV <sup>TM</sup> -1, SE <sup>TM</sup> -30, DC <sup>TM</sup> -200, RSL <sup>TM</sup> -150, RSL <sup>TM</sup> -160, PE-1, ZB-1, AT <sup>TM</sup> -1	
(5% Phenyl) - 95% methylpolysiloxane	<b>DN-5</b>	007-2, CP-Sil 8CB, DB <sup>TM</sup> -5, DB <sup>TM</sup> -5.625, HP <sup>TM</sup> -5, SAC-5, OV <sup>TM</sup> -5, PTE-5, PTE-5QTM, PAS-5, RSL-200, Rtx <sup>TM</sup> -5, SE-54, SPB-5, ULTRA-2, XTI-5, SE-52, BP-5, PE-2, ZB-5, AT <sup>TM</sup> -5, EC <sup>TM</sup> -5	
(5% Silphenyl) - 95% methylpolysiloxane	<b>DN-5 MS</b>	DB <sup>TM</sup> -5ms, Rtx <sup>TM</sup> -5 sil ms, HP <sup>TM</sup> -5ms, BPX-5, 007-5ms, AT <sup>TM</sup> -5ms	
(5% Phenyl) - 95% methylpolysiloxane	<b>DN-5 FAST</b>	007-2, CP-Sil 8CB, DB <sup>TM</sup> -5, DB <sup>TM</sup> -5.625, HP <sup>TM</sup> -5, SAC-5, OV <sup>TM</sup> -5, PTE-5, PTE-5QTM, PAS-5, RSL-200, Rtx <sup>TM</sup> -5, SE-54, SPB-5, ULTRA-2, XTI-5, SE-52, BP-5, PE-2, ZB-5, AT <sup>TM</sup> -5	
(20% Phenyl) - 80% methylpolysiloxane	<b>DN-20</b>	Rtx <sup>TM</sup> -20, SPB <sup>TM</sup> -20, 007 <sup>TM</sup> -7, VOCOL, PE-7, AT <sup>TM</sup> -20, EC <sup>TM</sup> -20	
(50% Phenyl) - 50% methylpolysiloxane	<b>DN-17</b>	HP <sup>TM</sup> -50+, Rtx <sup>TM</sup> -50, SP-2250, SPB-50, SPB-17, BPX-50, Rtx-65TG, BPX-50, CP-TAB-CB, 007-17, DB-17, HP <sup>TM</sup> -17, SP-50, CP Sil 24CB, PE-17, ZB-50, AT <sup>TM</sup> -50	
(50% Phenyl) - 50% methylpolysiloxane	<b>DN-17 FAST</b>	HP <sup>TM</sup> -50+, Rtx <sup>TM</sup> -50, SP-2250, SPB-50, SPB-17, BPX-50, Rtx-65TG, BPX-50, CP-TAB-CB, 007-17, DB-17, HP <sup>TM</sup> -17, SP-50, CP Sil 24CB, PE-17, ZB-50, AT <sup>TM</sup> -50	
(3.5% Cyanopropyl, 3.5% Phenyl) - 93% methylpolysiloxane	<b>DN-624</b>	007-1301, DB <sup>TM</sup> -624, DB <sup>TM</sup> -1301, HP <sup>TM</sup> -1301, HP <sup>TM</sup> -624, Rtx <sup>TM</sup> -1301, Rtx <sup>TM</sup> -624, SPB-1301, SPB-624, 007-624, ZB-624, AT <sup>TM</sup> -624, AT <sup>TM</sup> -1301	
(7% Cyanopropyl 7% Phenyl) - 86% methylpolysiloxane	<b>DN-1701</b>	007-1701, CP-Sil 19CB, DB-1701, HP <sup>TM</sup> -1701, OV <sup>TM</sup> -1701, PAS-1701, Rtx <sup>TM</sup> -1701, SPB-1701, BP-10, ZB-1701, AT <sup>TM</sup> -1701	
(7% Cyanopropyl 7% Phenyl) - 86% methylpolysiloxane	<b>DN-1701 FAST</b>	007-1701, CP-Sil 19CB, DB-1701, HP <sup>TM</sup> -1701, OV <sup>TM</sup> -1701, PAS-1701, Rtx <sup>TM</sup> -1701, SPB-1701, BP-10, ZB-1701, AT <sup>TM</sup> -1701	
Trifluoropropyl-methylpolysiloxane	<b>DN-200</b>	DB <sup>TM</sup> -210, RSL-400, Rtx <sup>TM</sup> -200, OV <sup>TM</sup> -202, OV <sup>TM</sup> -210, OV <sup>TM</sup> -215, QF-1, SP-2401, AT <sup>TM</sup> -210	
Trifluoropropyl-methylpolysiloxane	<b>DN-200 FAST</b>	DB <sup>TM</sup> -210, RSL-400, Rtx <sup>TM</sup> -200, OV <sup>TM</sup> -202, OV <sup>TM</sup> -210, OV <sup>TM</sup> -215, QF-1, SP-2401, AT <sup>TM</sup> -210	
(50% Cyanopropylphenyl) - 50% methylpolysiloxane	<b>DN-225</b>	007-225, CP-Sil43CB, DB <sup>TM</sup> -225, HP <sup>TM</sup> -225, OV <sup>TM</sup> -225, RSL-500,Rtx <sup>TM</sup> -225, BP-225, PE-225, AT <sup>TM</sup> -225	
(50% Cyanopropylphenyl) - 50% methylpolysiloxane	<b>DN-225 FAST</b>	007-225, CP-Sil43CB, DB <sup>TM</sup> -225, HP <sup>TM</sup> -225, OV <sup>TM</sup> -225, RSL-500,Rtx <sup>TM</sup> -225, BP-225, PE-225, AT <sup>TM</sup> -225	



**Standard Phase Cross Reference**

Composition	DANI	Similar Phases	Page
(50% Cyanopropyl) - 50% methylpolysiloxane	<b>DN-50</b>	DB <sup>TM</sup> -23, 007-23, PE-23, Rtx <sup>TM</sup> -2330, SP 2330, AT <sup>TM</sup> -SILAR	
(50% Cyanopropyl) - 50% methylpolysiloxane	<b>DN-50 FAST</b>	DB <sup>TM</sup> -23, 007-23, PE-23, Rtx <sup>TM</sup> -2330, SP 2330, AT <sup>TM</sup> -SILAR	
Polyethyleneglycol	<b>DN-WAX</b>	007-CW, Carbowax <sup>®</sup> 20M, CP-Wax 52CB, DB <sup>TM</sup> -WAX, Rtx <sup>TM</sup> -WAX, HP-20M, HP <sup>TM</sup> -Wax, Innowax <sup>TM</sup> , Omegawax, Stabilwax <sup>®</sup> , SUPELCOWAX <sup>®</sup> -10, SUPEROX <sup>®</sup> II, BP-20, ZB-WAX, AT <sup>TM</sup> -WAX, EC <sup>TM</sup> -WAX	
Polyethyleneglycol	<b>DN-WAX MS</b>	007-CW, Carbowax <sup>®</sup> 20M, CP-Wax 52CB, DB <sup>TM</sup> -WAX, Rtx <sup>TM</sup> -WAX, HP-20M, HP <sup>TM</sup> -Wax, Innowax <sup>TM</sup> , Omegawax, Stabilwax <sup>®</sup> , SUPELCOWAX <sup>®</sup> -10, SUPEROX <sup>®</sup> II, BP-20, ZB-WAX, AT <sup>TM</sup> -WAXms	
Polyethyleneglycol	<b>DN-WAX FAST</b>	007-CW, Carbowax <sup>®</sup> 20M, CP-Wax 52CB, DB <sup>TM</sup> -WAX, Rtx <sup>TM</sup> -WAX, HP-20M, HP <sup>TM</sup> -Wax, Innowax <sup>TM</sup> , Omegawax, Stabilwax <sup>®</sup> , SUPELCOWAX <sup>®</sup> -10, SUPEROX <sup>®</sup> II, BP-20, ZB-WAX, AT <sup>TM</sup> -WAX	
Acid-Modified Polyethylene Glycol	<b>DN-FFAP</b>	DB <sup>TM</sup> -FFAP, Stabilwax <sup>TM</sup> -DA, SP <sup>TM</sup> -1000, HP <sup>TM</sup> -FFAP, BP <sup>TM</sup> -21, CP-Wax <sup>TM</sup> 58 CB, 007 <sup>TM</sup> -FFAP, OV <sup>TM</sup> -351, SUPEROX <sup>®</sup> FA, Nukol <sup>TM</sup> , AT <sup>TM</sup> -1000, EC <sup>TM</sup> -1000	
Acid-Modified Polyethylene Glycol	<b>DN-FFAP FAST</b>	DB <sup>TM</sup> -FFAP, Stabilwax <sup>TM</sup> -DA, SP <sup>TM</sup> -1000, HP <sup>TM</sup> -FFAP, BP <sup>TM</sup> -21, CP-Wax <sup>TM</sup> 58 CB, 007 <sup>TM</sup> -FFAP, OV <sup>TM</sup> -351, SUPEROX <sup>®</sup> FA, Nukol <sup>TM</sup> , AT <sup>TM</sup> -1000	
Poly(biscyanopropyl siloxane)	<b>DN-10</b>	CP-Sil <sup>TM</sup> 88, OV <sup>TM</sup> -275, Rtx <sup>TM</sup> -2330, SP <sup>TM</sup> -2340	
Poly(biscyanopropyl siloxane)	<b>DN-10 FAST</b>	CP-Sil <sup>TM</sup> 88, OV <sup>TM</sup> -275, Rtx <sup>TM</sup> -2330, SP <sup>TM</sup> -2340	
(13% Phenyl) - 87% methylpolysiloxane	<b>DN-13</b>	CP-Sil <sup>TM</sup> 13 CB	
(13% Phenyl) - 87% methylpolysiloxane	<b>DN-13 FAST</b>	CP-Sil <sup>TM</sup> 13 CB	
	<b>DN-PLUS</b>	NO EQUIVALENT	
	<b>DN-PLUS FAST</b>	NO EQUIVALENT	
	<b>DN-264</b>	NO EQUIVALENT	
	<b>DN-264 FAST</b>	NO EQUIVALENT	
	<b>DN-SAFE</b>	ALL PHASES	
	<b>DN-BioDiesel</b>	NO EQUIVALENT	
	<b>DN-PAH</b>	NO EQUIVALENT	
	<b>DN-PAH FAST</b>	NO EQUIVALENT	
	<b>DN-SOLVE</b>	NO EQUIVALENT	
	<b>DN-68</b>	NO EQUIVALENT	
	<b>DN-BASIC</b>	NO EQUIVALENT	
	<b>DN-LAP</b>	NO EQUIVALENT	
Dimethyl Tert Butyl Silyl $\beta$ Cyclodextrine	<b>DN-Beta 1</b>		
Diacetyl Tert Butyl Silyl $\beta$ Cyclodextrine	<b>DN-Beta 2</b>		
Dimethyl Pentyl $\beta$ Cyclodextrine	<b>DN-Beta 3</b>		
Diethyl Tert Butyl Silyl $\beta$ Cyclodextrine	<b>DN-Beta 4</b>		
Diacetyl Tert Butyl Silyl Y Cyclodextrine	<b>DN-Gamma 1</b>		
Diethyl Tert Butyl Silyl Y Cyclodextrine	<b>DN-Gamma 2</b>		



### Phase Polarity Reference

Polarity	DANI	Ideal for
Non-polar	<b>DN-1</b>	Alcohols, aromatic hydrocarbons, esters, flavours and aromas, free fatty acids, glycols, halogenated hydrocarbons, hydrocarbons, ketones, organic acids, oxygenates, PAHs, pesticides, polymers, steroids, solvents, sulphur compounds.
Non-polar	<b>DN-1 MS</b>	GC/MS applications
Non-polar	<b>DN-1 FAST</b>	Fast GC applications
Non-polar	<b>DN-5</b>	Alcohols, amines, hydrocarbons, bile acids, drugs, EPA methods, FAME, flavours and aromas, glycerides, halogenated compounds, PAHs, PCBs, pesticides, steroids,
Non-polar	<b>DN-5 MS</b>	GC/MS applications
Non-polar	<b>DN-5 FAST</b>	Fast GC applications
Intermediate Polarity	<b>DN-20</b>	Volatile compounds and Solvents
Intermediate Polarity	<b>DN-17</b>	Pesticides, Herbicides, Phthalate Esters, Free, Phenols, and Basic Drugs
Intermediate Polarity	<b>DN-17 FAST</b>	Fast GC applications
Intermediate Polarity	<b>DN-624</b>	Volatile Organics, Pharmaceuticals and EPA Method 612, 524, 601, 602, 624, 8240 and 8260
Intermediate Polarity	<b>DN-1701</b>	Pesticides, PCB's, Drugs, Herbicides and TMS Sugars
Intermediate Polarity	<b>DN-1701 FAST</b>	Fast GC applications
Polar	<b>DN-200</b>	Ketones, Aldehydes, Silanes, Glycols, Nitro Aromatics, Herbicides, and Method 8140 and 609
Polar	<b>DN-200 FAST</b>	Fast GC applications
Mid to High Polarity	<b>DN-225</b>	Carbohydrates, Solvents, FAME, halogenated compounds, phenols and pyridines
Mid to High Polarity	<b>DN-225 FAST</b>	Fast GC applications
High Polarity	<b>DN-50</b>	cis/trans Fatty Acids Methyl Esters
High Polarity	<b>DN-50 FAST</b>	Fast GC applications
Polar	<b>DN-WAX</b>	FAMEs, Polar Solvents, Flavour and Fragrances, Glycols, Alcohols, Aldehydes, anaesthetics, antidepressants, aromatic hydrocarbons, esters, halogenated compounds, ketones, nitro compounds, PAHs, phenols and sulphur compounds
Polar	<b>DN-WAX MS</b>	GC/MS applications
Polar	<b>DN-WAX FAST</b>	Fast GC applications
High Polarity	<b>DN-FFAP</b>	FAME, flavours and aromas, free fatty acids, organic acids and phenols
High Polarity	<b>DN-FFAP FAST</b>	Fast GC applications
High Polarity	<b>DN-10</b>	Dioxins, FAME, PCBs, PCDFs, pyridines and sugars
High Polarity	<b>DN-10 FAST</b>	Fast GC applications
Intermediate Polarity	<b>DN-13</b>	Amines, aromatic hydrocarbons, fungicides, halogenated compounds, herbicides, pesticides, PCBs, phenols, phthalate esters, steroids, sugars and tranquilizers
Intermediate Polarity	<b>DN-13 FAST</b>	Fast GC applications
High Polarity	<b>DN-PLUS</b>	Alcohols, aromatic hydrocarbons, solvents, phenols, aldehydes
High Polarity	<b>DN-PLUS FAST</b>	Fast GC applications
Low Polarity	<b>DN-264</b>	Amines, anaesthetics
Low Polarity	<b>DN-264 FAST</b>	Fast GC applications
Dedicated	<b>DN-BioDiesel</b>	BioDiesel according to UNI EN ISO 14105 - ASTM 6584 BioDiesel according to UNI EN ISO 14103:2003
Dedicated	<b>DN-PAH</b>	Polyaromatic Hydrocarbons (PAHs)
Dedicated	<b>DN-PAH FAST</b>	Fast GC Polyaromatic Hydrocarbons (PAHs)
Dedicated	<b>DN-SOLVE</b>	Solvents
Dedicated	<b>DN-68</b>	Phosphorous Pesticides
Dedicated	<b>DN-BASIC</b>	Basic Compounds, Ammines
Dedicated	<b>DN-LAP</b>	Saturated and unsaturated Triglycerides
Chiral	<b>DN-Beta 1</b>	Linalool, camphor, methol
Chiral	<b>DN-Beta 2</b>	Delta-lactones
Chiral	<b>DN-Beta 3</b>	Isoborneol, isobornyl acetate
Chiral	<b>DN-Beta 4</b>	Gamma-lactones, nerolidol, linalyl acetate
Chiral	<b>DN-Gamma 1</b>	High boiling compound isomers, Pesticide isomers
Chiral	<b>DN-Gamma 2</b>	High boiling compound isomers, Pesticide isomers





## DANI GC Capillary Column Equivalents

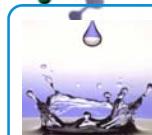
**DANI** A SCENT OF FUTURE

Column Equivalency								
DANI	AGILENT	ALLTECH	VARIAN	RESTEK	SUPERCO	SGE	QUADREX	PHENOMENEX
<b>DN-1</b>	DB <sup>TM</sup> -1 HP <sup>TM</sup> -1 HP <sup>TM</sup> -101 ULTRA <sup>TM</sup> -1	AT <sup>TM</sup> -1 EC <sup>TM</sup> -1	CP-Sil <sup>TM</sup> 5 CB	Rtx <sup>TM</sup> -1	SPB <sup>TM</sup> -1 SPB <sup>TM</sup> -Sulfur SP <sup>TM</sup> -2100	BP <sup>TM</sup> -1	007 <sup>TM</sup> -1	ZB-1
<b>DN-1 MS</b>	DB <sup>TM</sup> -1ms  HP <sup>TM</sup> -1ms	AT <sup>TM</sup> -1ms	CP-Sil <sup>TM</sup> 5 CB	Rtx <sup>TM</sup> -1ms				
<b>DN-1 FAST</b>	DB <sup>TM</sup> -1 HP <sup>TM</sup> -1 HP <sup>TM</sup> -101 ULTRA <sup>TM</sup> -1	AT <sup>TM</sup> -1	CP-Sil <sup>TM</sup> 5 CB	Rtx <sup>TM</sup> -1	SPB <sup>TM</sup> -1 SPB <sup>TM</sup> -Sulfur SP <sup>TM</sup> -2100	BP <sup>TM</sup> -1	007 <sup>TM</sup> -1	ZB-1
<b>DN-5</b>	DB <sup>TM</sup> -5 DB <sup>TM</sup> -5.625 HP <sup>TM</sup> -5 ULTRA <sup>TM</sup> -2	AT <sup>TM</sup> -5 EC <sup>TM</sup> -5	CP-Sil 8CB	Rtx <sup>TM</sup> -5	SPB-5	BP-5	007-2	ZB-5
<b>DN-5 MS</b>	DB <sup>TM</sup> -5ms HP <sup>TM</sup> -5ms	AT <sup>TM</sup> -5ms		Rtx <sup>TM</sup> -5 sil ms		BPX-5	007-5ms	
<b>DN-5 FAST</b>	DB <sup>TM</sup> -5 DB <sup>TM</sup> -5.625 HP <sup>TM</sup> -5 ULTRA <sup>TM</sup> -2	AT <sup>TM</sup> -5	CP-Sil 8CB	Rtx <sup>TM</sup> -5	SPB-5	BP-5	007-2	ZB-5
<b>DN-20</b>		AT <sup>TM</sup> -20 EC <sup>TM</sup> -20		Rtx <sup>TM</sup> -20	SPB <sup>TM</sup> -20 VOCOL		007 <sup>TM</sup> -7	
<b>DN-17</b>	HP-50+ DB-17 HP <sup>TM</sup> -17	AT <sup>TM</sup> -50	CP-TAB-CB CP Sil 24CB	Rtx-50 Rtx-65TG	SP-2250 SPB-50 SPB-17	BPX-50	007-17	ZB-50
<b>DN-17 FAST</b>	HP-50+ DB-17 HP <sup>TM</sup> -17	AT <sup>TM</sup> -50	CP-TAB-CB CP Sil 24CB	Rtx-50 Rtx-65TG	SP-2250 SPB-50 SPB-17	BPX-50	007-17	ZB-50
<b>DN-624</b>	DB <sup>TM</sup> -624 DB <sup>TM</sup> -1301 HP <sup>TM</sup> -1301 HP <sup>TM</sup> -624	AT <sup>TM</sup> -624 AT <sup>TM</sup> -1301		Rtx <sup>TM</sup> -1301 Rtx <sup>TM</sup> -624	SPB-1301 SPB-624		007-1301 007-624	ZB-624
<b>DN-1701</b>	DB-1701 HP <sup>TM</sup> -1701	AT <sup>TM</sup> -1701	CP-Sil 19CB	Rtx <sup>TM</sup> -1701	SPB-1701	BP-10	007-1701	ZB-1701
<b>DN-1701 FAST</b>	DB-1701 HP <sup>TM</sup> -1701	AT <sup>TM</sup> -1701	CP-Sil 19CB	Rtx <sup>TM</sup> -1701	SPB-1701	BP-10	007-1701	ZB-1701
<b>DN-200</b>	DB <sup>TM</sup> -210	AT <sup>TM</sup> -210		Rtx <sup>TM</sup> -200	SP-2401			
<b>DN-200 FAST</b>	DB <sup>TM</sup> -210	AT <sup>TM</sup> -210		Rtx <sup>TM</sup> -200	SP-2401			
<b>DN-225</b>	DB <sup>TM</sup> -225 HP <sup>TM</sup> -225	AT <sup>TM</sup> -225	CP-Sil43CB	Rtx <sup>TM</sup> -225		BP-225	007-225	
<b>DN-225 FAST</b>	DB <sup>TM</sup> -225 HP <sup>TM</sup> -225	AT <sup>TM</sup> -225	CP-Sil43CB	Rtx <sup>TM</sup> -225		BP-225	007-225	
<b>DN-50</b>	DB <sup>TM</sup> -23	AT <sup>TM</sup> -SILAR		Rtx <sup>TM</sup> -2330	SP 2330		007-23	
<b>DN-50 FAST</b>	DB <sup>TM</sup> -23	AT <sup>TM</sup> -SILAR		Rtx <sup>TM</sup> -2330	SP 2330		007-23	
<b>DN-WAX</b>	DB <sup>TM</sup> -WAX HP-20M HP <sup>TM</sup> -Wax Innowax <sup>TM</sup>	AT <sup>TM</sup> -WAX EC <sup>TM</sup> -WAX	CP-Wax 52CB	Rtx <sup>TM</sup> -WAX Stabilwax <sup>®</sup>	OmegaWax <sup>TM</sup> SupelcoWax <sup>®</sup> -10	BP-20	007-CW	ZB-WAX
<b>DN-WAX MS</b>	DB <sup>TM</sup> -WAX HP-20M HP <sup>TM</sup> -Wax Innowax <sup>TM</sup>	AT <sup>TM</sup> -WAXms	CP-Wax 52CB	Rtx <sup>TM</sup> -WAX Stabilwax <sup>®</sup>	OmegaWax <sup>TM</sup> SupelcoWax <sup>®</sup> -10			
<b>DN-WAX FAST</b>	DB <sup>TM</sup> -WAX HP-20M HP <sup>TM</sup> -Wax Innowax <sup>TM</sup>	AT <sup>TM</sup> -WAX	CP-Wax 52CB	Rtx <sup>TM</sup> -WAX Stabilwax <sup>®</sup>	OmegaWax <sup>TM</sup> SupelcoWax <sup>®</sup> -10			
<b>DN-FFAP</b>	DB <sup>TM</sup> -FFAP HP <sup>TM</sup> -FFAP	AT <sup>TM</sup> -1000 EC <sup>TM</sup> -1000	CP-Wax <sup>TM</sup> 58 CB	Stabilwax <sup>TM</sup> -DA	SP <sup>TM</sup> -1000	BP <sup>TM</sup> -21	007 <sup>TM</sup> -FFAP	
<b>DN-FFAP FAST</b>	DB <sup>TM</sup> -FFAP HP <sup>TM</sup> -FFAP	AT <sup>TM</sup> -1000	CP-Wax <sup>TM</sup> 58 CB	Stabilwax <sup>TM</sup> -DA	SP <sup>TM</sup> -1000	BP <sup>TM</sup> -21	007 <sup>TM</sup> -FFAP	
<b>DN-10</b>			CP-Sil <sup>TM</sup> 88	Rtx <sup>TM</sup> -2330	SP <sup>TM</sup> -2340			
<b>DN-10 FAST</b>			CP-Sil <sup>TM</sup> 88	Rtx <sup>TM</sup> -2330	SP <sup>TM</sup> -2340			
<b>DN-13</b>			CP-Sil <sup>TM</sup> 13 CB					
<b>DN-13 FAST</b>			CP-Sil <sup>TM</sup> 13 CB					
<b>DN-SAFE</b>	Dura Guard <sup>TM</sup>		EZ-Guard <sup>TM</sup>	Integra <sup>TM</sup>				



## DANI GC Capillary Columns Chromatograms

Chroma	Applications	DANI Column
001	Hydrocarbons in Natural Gas	DN-1 30m 0.32mm 5.00µm
002	Phthalates - EPA Method 606	DN-1 15m 0.53mm 1.50µm
003	Pesticides	DN-1 25m 0.25mm 0.25µm
004	Butter Triglycerides C24-C56	DN-1 30m 0.32mm 0.15µm
005	Ketones	DN-1 10m 0.53mm 1.00µm
006	Cyclic Hydrocarbons	DN-1 10m 0.53mm 1.00µm
007	Drugs 1	DN-1 15m 0.25mm 0.25µm
008	Drugs 2	DN-1 15m 0.25mm 0.25µm
009	Phenols	DN-1 10m 0.53mm 1.00µm
010	Anaesthetics	DN-5 25m 0.25mm 0.25µm
011	Arochlor 1254/1260	DN-5 25m 0.32mm 0.25µm
012	Halogenated Hydrocarbons - EPA Method 612	DN-5 15m 0.53mm 1.50µm
013	Organochlorinated Pesticides EPA Method 608/8081	DN-5 25m 0.32mm 0.25µm
014	Pharmaceuticals	DN-5 25m 0.25mm 0.25µm
015	Sterols in Olive Oil	DN-5 25m 0.25mm 0.25µm
016	Phenols EPA Method 604	DN-5 25m 0.32mm 1.00µm
017	Nitrosamines EPA Method 607	DN-5 15m 0.53mm 1.50µm
018	PAH's EPA Method 610/8100	DN-5 25m 0.32mm 0.25µm
019	Haloethers EPA Method 611/8110	DN-5 15m 0.53mm 1.50µm
020	Hydrocarbon Oil Index ISO 9377-2	DN-5 30m 0.32mm 0.25µm
021	Alkyl Naphtalens	DN-5 10m 0.53mm 1.00µm
022	Allergens	DN-5 FAST 5m 0.10mm 0.10µm
023	Bergamot	DN-5 FAST 5m 0.10mm 0.10µm
024	Pesticides	DN-5 FAST 5m 0.10mm 0.10µm
025	Pesticides	DN-1701 25m 0.25mm 0.25µm
026	Allergens	DN-1701 FAST 5m 0.10mm 0.10µm
027	Bergamot	DN-1701 FAST 5m 0.10mm 0.10µm
028	Pesticides	DN-1701 FAST 5m 0.10mm 0.10µm
029	Fatty Acid Methyl Esters (FAME) C4-C18:3	DN-WAX 25m 0.32mm 0.25µm
030	Aromatics - EPA Method 602	DN-WAX 25m 0.53mm 1.00µm
031	Fatty Acid Methyl Esters (FAME)	DN-WAX 25m 0.32mm 0.25µm
032	N-Nitrosamines	DN-WAX 25m 0.32mm 1.00µm
033	Triazine - EPA Method 619	DN-WAX 25m 0.32mm 0.25µm
034	Dimethylaniline	DN-WAX 30m 0.32mm 0.25µm
035	Residual Solvents in radiopharmaceuticals	DN-WAX 25m 0.25mm 0.25µm
063	Menthol in cigarettes	DN-WAX 30m 0.53mm 1.00µm
036	Allergens	DN-WAX FAST 5m 0.10mm 0.10µm
037	Bergamot	DN-WAX FAST 5m 0.10mm 0.10µm
063	Fatty Acid Methyl Esters (FAME)	DN-WAX FAST 15m 0.10mm 0.10µm
064	Glycol Ethers	DN-WAX FAST 15m 0.10mm 0.10µm
065	Phenols	DN-WAX FAST 15m 0.10mm 0.10µm
038	Free Acids	DN-FFAP 25m 0.32mm 0.25µm
039	Organic Acids	DN-FFAP 15m 0.53mm 1.00µm
040	Chemicals	DN-FFAP 15m 0.53mm 1.00µm
041	Amides	DN-FFAP 15m 0.53mm 1.00µm
042	Flavours Test Mixture	DN-FFAP 25m 0.25mm 0.25µm
043	FAME cis trans in Olive Oil	DN-10 50m 0.32mm 0.25µm
044	Amines	DN-264 30m 0.32mm 5.00µm
045	Anaesthetics	DN-264 30m 0.32mm 5.00µm
046	Solvents	DN-SOLVE 50m 0.32mm 0.25µm
047	Phosphorous Pesticides	DN-68 25m 0.32mm 0.25µm
062	Phosphorous Pesticides in essential oil of tangerine	DN-68 25m 0.32mm 0.25µm
048	Amines	DN-BASIC 25m 0.32mm 0.25µm
049	Sterols TMS - Peanut Oil	DN-LAP 25m 0.32mm 0.10µm
050	Sterols TMS - Sunflower Oil	DN-LAP 25m 0.32mm 0.10µm
051	Sterols TMS - Mais Oil	DN-LAP 25m 0.32mm 0.10µm
052	Triglycerides - Hazelnut Oil	DN-LAP 25m 0.32mm 0.10µm
053	Triglycerides - Olive Oil	DN-LAP 25m 0.32mm 0.10µm
054	Sterols TMS - Soya Oil	DN-LAP 25m 0.32mm 0.10µm
055	Delta Lactones - C8-C12	DN-Beta 2 25m 0.25mm 0.25µm
056	Pharmaceutical Enantiomers	DN-Beta 3 25m 0.25mm 0.25µm
057	Linalool	DN-Beta 4 25m 0.25mm 0.25µm
058	Gamma Lactones - C6-C12	DN-Beta 4 25m 0.25mm 0.25µm
059	BIODIESEL according to UNI EN ISO 14105 - ASTM 6584	DN-BioDiesel 15m 0.32mm 0.10µm
060	BIODIESEL according to UNI EN ISO 14103:2003	DN-BioDiesel 30m 0.32mm 0.25µm
061	BIODIESEL according to UNI EN ISO 14110:2003	DN-BioDiesel 30m 0.32mm 1.00µm
066	FAST GC: Polyaromatic Hydrocarbons (PAHs)	DN-PAH FAST 15m 0.10mm 0.10µm
067	Polyaromatic Hydrocarbons (PAHs)	DN-PAH 15m 0.25mm 0.25µm

# DN-1

## DN-1

## 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 001	
0.25mm	0.25µm	350°C	9414.116 002	007/008
0.25mm	0.45µm	330°C	9414.116 003	
0.25mm	1.00µm	330°C	9414.116 004	
0.25mm	1.50µm	330°C	9414.116 005	
0.32mm	0.15µm	350°C	9414.116 006	
0.32mm	0.25µm	350°C	9414.116 007	
0.32mm	0.45µm	330°C	9414.116 008	
0.32mm	1.00µm	330°C	9414.116 009	
0.32mm	1.50µm	330°C	9414.116 010	
0.32mm	3.00µm	320°C	9414.116 011	
0.32mm	5.00µm	320°C	9414.116 012	
0.53mm	0.15µm	350°C	9414.116 013	
0.53mm	0.25µm	350°C	9414.116 014	
0.53mm	0.45µm	330°C	9414.116 015	
0.53mm	1.00µm	330°C	9414.116 016	
0.53mm	1.50µm	330°C	9414.116 017	002
0.53mm	3.00µm	320°C	9414.116 018	
0.53mm	5.00µm	320°C	9414.116 019	

## DN-1

## 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 058	
0.25mm	0.25µm	350°C	9414.116 059	
0.25mm	0.45µm	330°C	9414.116 060	
0.25mm	1.00µm	330°C	9414.116 061	
0.25mm	1.50µm	330°C	9414.116 062	
0.32mm	0.15µm	350°C	9414.116 063	
0.32mm	0.25µm	350°C	9414.116 064	
0.32mm	0.45µm	330°C	9414.116 065	
0.32mm	1.00µm	330°C	9414.116 066	
0.32mm	1.50µm	330°C	9414.116 067	
0.32mm	3.00µm	320°C	9414.116 068	
0.32mm	5.00µm	320°C	9414.116 069	
0.53mm	0.15µm	350°C	9414.116 070	
0.53mm	0.25µm	350°C	9414.116 071	
0.53mm	0.45µm	330°C	9414.116 072	
0.53mm	1.00µm	330°C	9414.116 073	
0.53mm	1.50µm	330°C	9414.116 074	
0.53mm	3.00µm	320°C	9414.116 075	
0.53mm	5.00µm	320°C	9414.116 076	

## DN-1

## 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 020	
0.25mm	0.25µm	350°C	9414.116 021	003
0.25mm	0.45µm	330°C	9414.116 022	
0.25mm	1.00µm	330°C	9414.116 023	
0.25mm	1.50µm	330°C	9414.116 024	
0.32mm	0.15µm	350°C	9414.116 025	
0.32mm	0.25µm	350°C	9414.116 026	
0.32mm	0.45µm	330°C	9414.116 027	
0.32mm	1.00µm	330°C	9414.116 028	
0.32mm	1.50µm	330°C	9414.116 029	
0.32mm	3.00µm	320°C	9414.116 030	
0.32mm	5.00µm	320°C	9414.116 031	
0.53mm	0.15µm	350°C	9414.116 032	
0.53mm	0.25µm	350°C	9414.116 033	
0.53mm	0.45µm	330°C	9414.116 034	
0.53mm	1.00µm	330°C	9414.116 035	
0.53mm	1.50µm	330°C	9414.116 036	
0.53mm	3.00µm	320°C	9414.116 037	
0.53mm	5.00µm	320°C	9414.116 038	

## DN-1

## 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 077	
0.25mm	0.25µm	350°C	9414.116 078	
0.25mm	0.45µm	330°C	9414.116 079	
0.25mm	1.00µm	330°C	9414.116 080	
0.25mm	1.50µm	330°C	9414.116 081	
0.32mm	0.15µm	350°C	9414.116 082	
0.32mm	0.25µm	350°C	9414.116 083	
0.32mm	0.45µm	330°C	9414.116 084	
0.32mm	1.00µm	330°C	9414.116 085	
0.32mm	1.50µm	330°C	9414.116 086	
0.32mm	3.00µm	320°C	9414.116 087	
0.32mm	5.00µm	320°C	9414.116 088	
0.53mm	0.15µm	350°C	9414.116 089	
0.53mm	0.25µm	350°C	9414.116 090	
0.53mm	0.45µm	330°C	9414.116 091	
0.53mm	1.00µm	330°C	9414.116 092	
0.53mm	1.50µm	330°C	9414.116 093	
0.53mm	3.00µm	320°C	9414.116 094	
0.53mm	5.00µm	320°C	9414.116 095	

## DN-1

## 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 039	
0.25mm	0.25µm	350°C	9414.116 040	
0.25mm	0.45µm	330°C	9414.116 041	
0.25mm	1.00µm	330°C	9414.116 042	
0.25mm	1.50µm	330°C	9414.116 043	
0.32mm	0.15µm	350°C	9414.116 044	004
0.32mm	0.25µm	350°C	9414.116 045	
0.32mm	0.45µm	330°C	9414.116 046	
0.32mm	1.00µm	330°C	9414.116 047	
0.32mm	1.50µm	330°C	9414.116 048	
0.32mm	3.00µm	320°C	9414.116 049	
0.32mm	5.00µm	320°C	9414.116 050	001
0.53mm	0.15µm	350°C	9414.116 051	
0.53mm	0.25µm	350°C	9414.116 052	
0.53mm	0.45µm	330°C	9414.116 053	
0.53mm	1.00µm	330°C	9414.116 054	
0.53mm	1.50µm	330°C	9414.116 055	
0.53mm	3.00µm	320°C	9414.116 056	
0.53mm	5.00µm	320°C	9414.116 057	

## DN-1

## Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-1 Capillary Column

100% Dimethylpolysiloxane

Non-polar

Bonded and cross-linked

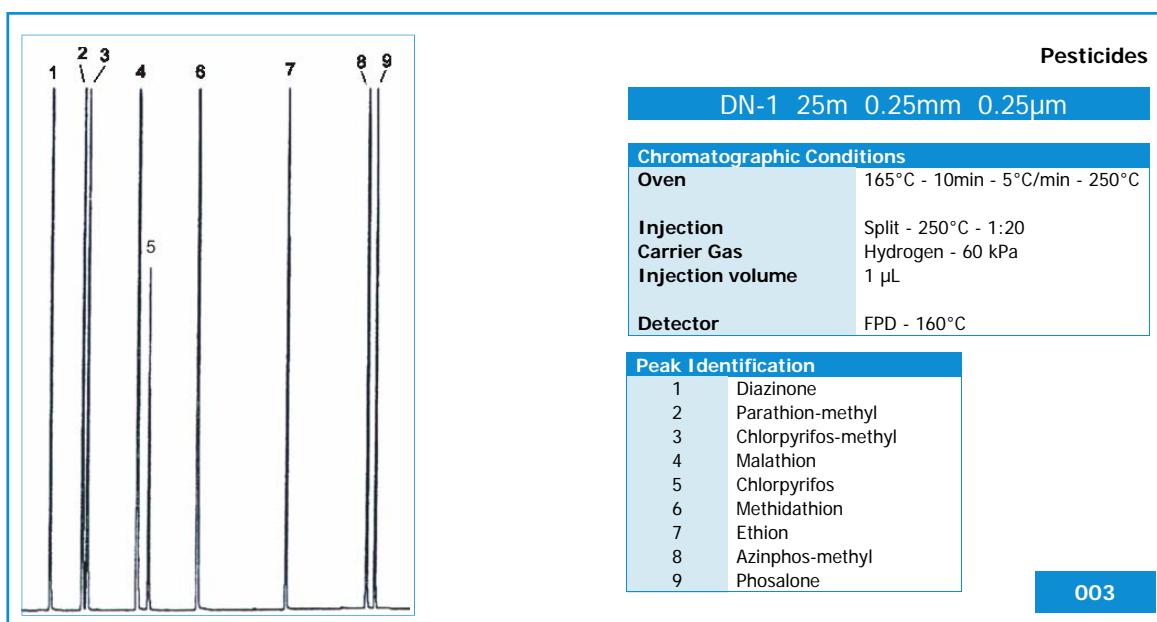
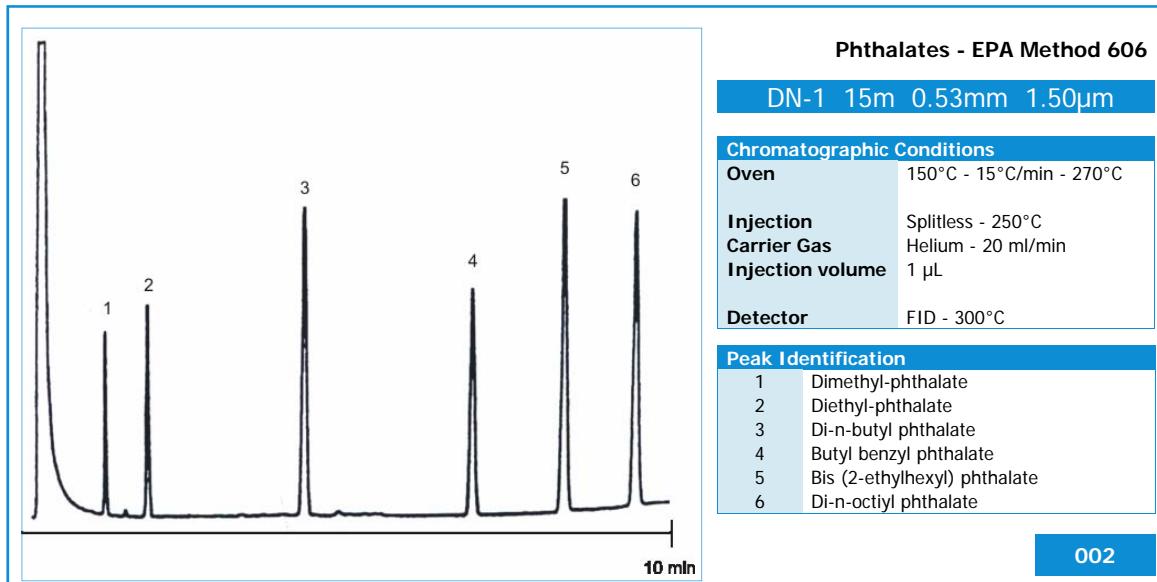
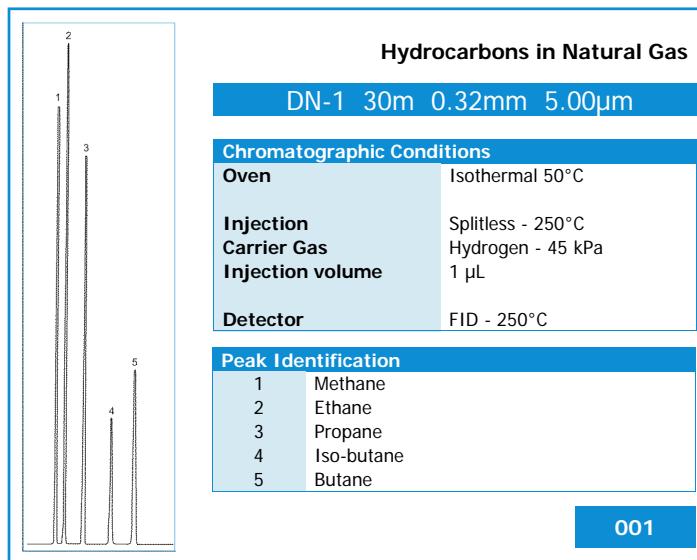
Inertness

Low bleeding

Good thermal stability

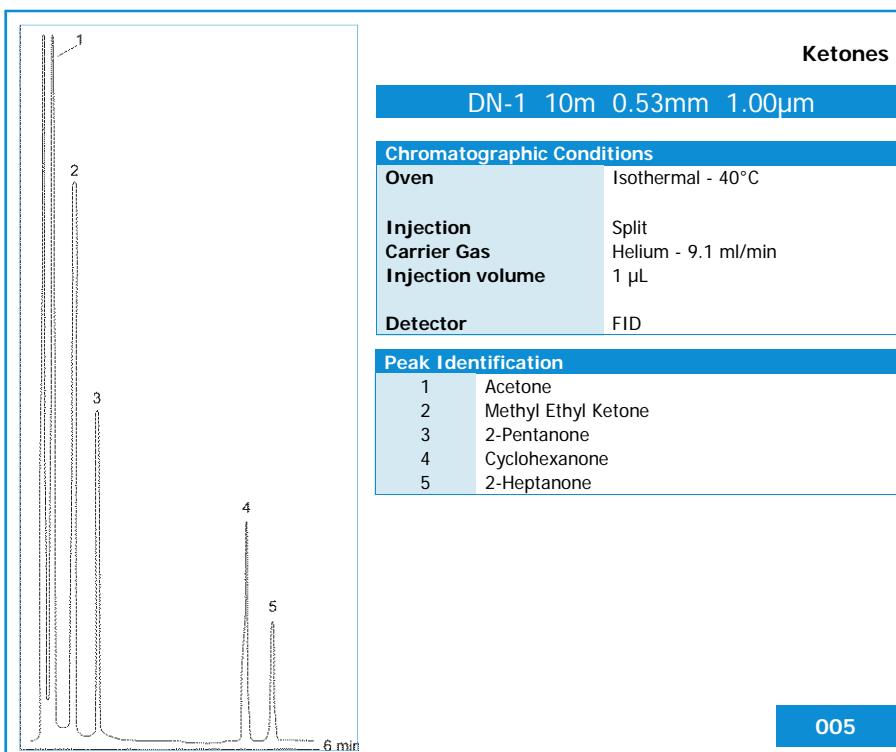
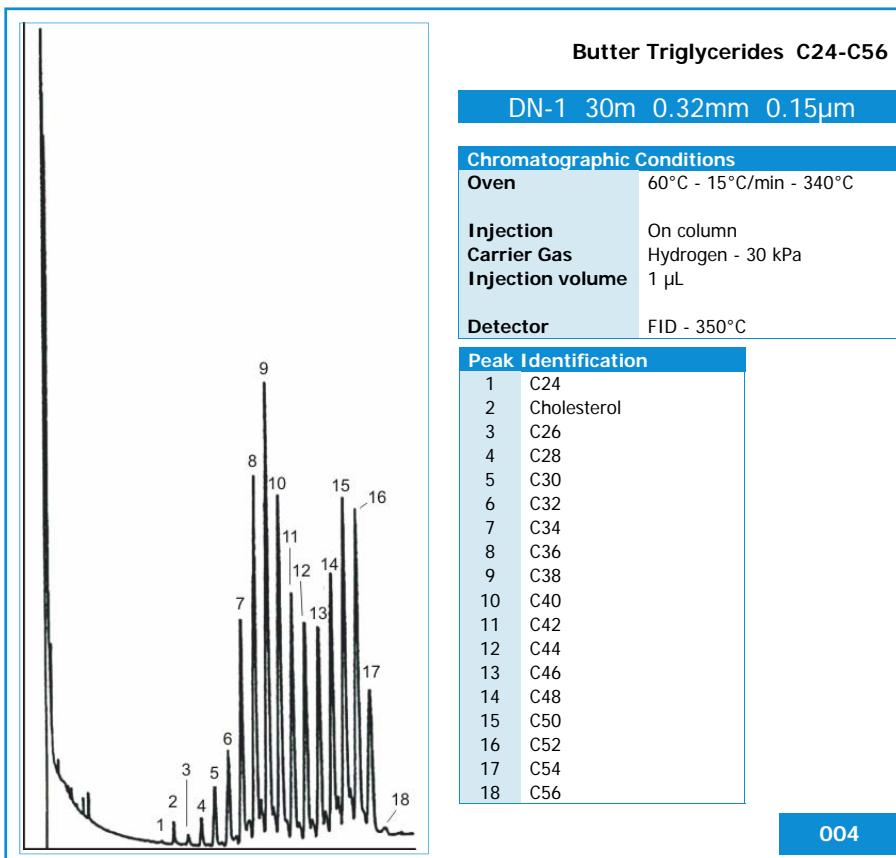
Similar to      DB<sup>TM</sup>-1, Rtx<sup>TM</sup>-1, SPB<sup>TM</sup>-1, SPB<sup>TM</sup>-Sulfur, SP<sup>TM</sup>-2100, HP<sup>TM</sup>-1, HP<sup>TM</sup>-101, ULTRA<sup>TM</sup>-1, Bp<sup>TM</sup>-1, CP-Sil<sup>TM</sup> 5 CB, 007<sup>TM</sup>-1, OV<sup>TM</sup>-1, SE<sup>TM</sup>-30, DC<sup>TM</sup>-200, RSL<sup>TM</sup>-150, RSL<sup>TM</sup>-160, PE-1, ZB-1, AT<sup>TM</sup>-1, EC<sup>TM</sup>-1

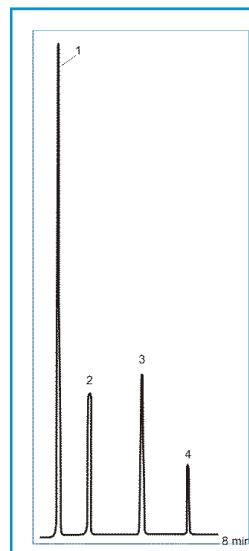
Equivalent to    USP G1, G2, G38



**DN-1**

## Chromatograms



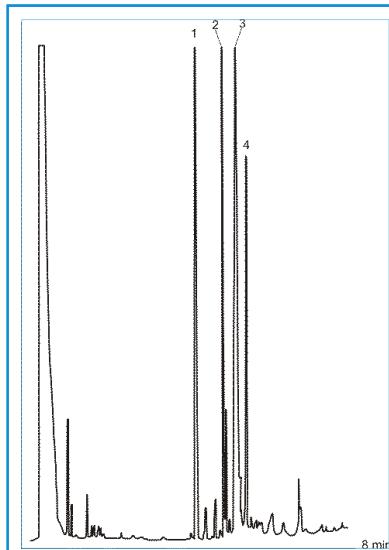
**Cyclic Hydrocarbons**DN-1 10m 0.53mm 1.00 $\mu$ m**Chromatographic Conditions**

Oven	40°C - 5°C/min - 100°C
Injection	Split
Carrier Gas	Helium - 5 ml/min
Injection volume	1 $\mu$ L
Detector	FID

**Peak Identification**

1	Cyclohexane
2	n-Decane
3	Cycloheptane
4	Cyclooctane

006

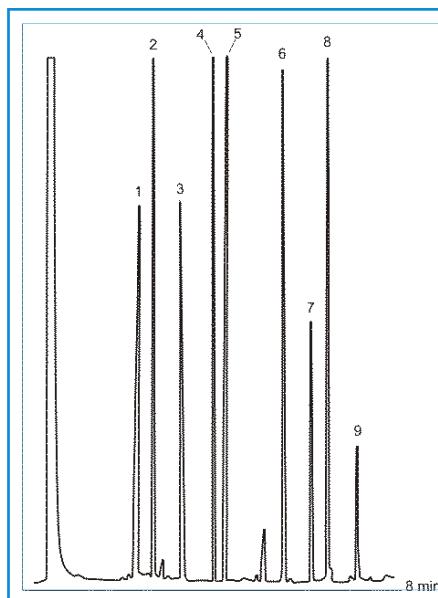
**Drugs 1**DN-1 15m 0.25mm 0.25 $\mu$ m**Chromatographic Conditions**

Oven	120°C - 25°C/min - 310°C
Injection	Split - 280°C - 1:50
Carrier Gas	Hydrogen - 30 kPa
Injection volume	1 $\mu$ L
Detector	FID - 320°C

**Peak Identification**

1	Docosane (internal standard)
2	CBD Cannabidiol
3	THC Tetrahydrocannabinol
4	CBN Cannabinol

007

**Drugs 2**DN-1 15m 0.25mm 0.25 $\mu$ m**Chromatographic Conditions**

Oven	120°C - 25°C/min - 310°C
Injection	Split - 280°C - 1:50
Carrier Gas	Hydrogen - 30 kPa
Injection volume	1 $\mu$ L
Detector	FID - 320°C

**Peak Identification**

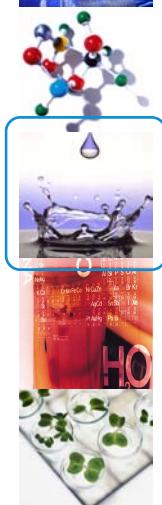
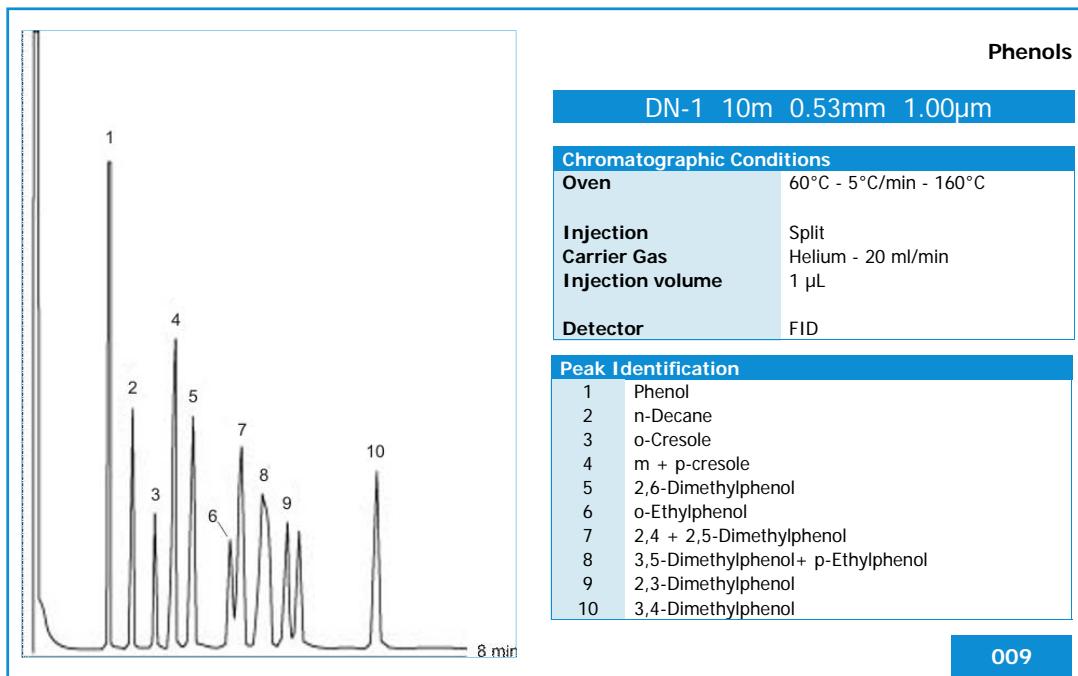
1	Caffeine
2	Lidocaine
3	Procaine
4	Cocaine
5	Butylantranilone (internal standard)
6	Heroin
7	Papaverine
8	Etaverine (internal standard)
9	Narcotine

008




# DN-1

## Chromatograms



## DN-1 HT

15m

## DN-1 HT

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 192	
0.32mm	0.10µm	380°C	9414.117 193	
0.53mm	0.10µm	380°C	9414.117 194	

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 201	
0.32mm	0.10µm	380°C	9414.117 202	
0.53mm	0.10µm	380°C	9414.117 203	

## DN-1 HT

25m

## DN-1 HT

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 195	
0.32mm	0.10µm	380°C	9414.117 196	
0.53mm	0.10µm	380°C	9414.117 197	

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 204	
0.32mm	0.10µm	380°C	9414.117 205	
0.53mm	0.10µm	380°C	9414.117 206	

## DN-1 HT

30m

## DN-1 HT

Technical Specifications

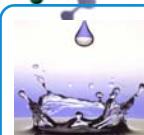
ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 198	
0.32mm	0.10µm	380°C	9414.117 199	
0.53mm	0.10µm	380°C	9414.117 200	

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

DANI DN-1 HT Capillary Column  
100% Dimethylpolysiloxane  
Non-polar  
Bonded and cross-linked  
Inertness  
Low bleeding  
Good thermal stability

Similar to DB<sup>TM</sup>-1, Rtx<sup>TM</sup>-1, SPB<sup>TM</sup>-1, SPB<sup>TM</sup>-Sulfur, SP<sup>TM</sup>-2100, HP<sup>TM</sup>-1, HP<sup>TM</sup>-101, ULTRA<sup>TM</sup>-1, BP<sup>TM</sup>-1, CP-Sil<sup>TM</sup> 5 CB, 007<sup>TM</sup>-1, OV<sup>TM</sup>-1, SE<sup>TM</sup>-30, DC<sup>TM</sup>-200, RSL<sup>TM</sup>-150, RSL<sup>TM</sup>-160, PE-1, ZB-1, AT<sup>TM</sup>-1, ECT<sup>TM</sup>-1

Equivalent to USP G1, G2, G38

# DN-1 MS

## DN-1 MS

15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 096	
0.25mm	0.25µm	350°C	9414.116 097	
0.32mm	0.15µm	350°C	9414.116 098	
0.32mm	0.25µm	350°C	9414.116 099	

## DN-1 MS

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 108	
0.25mm	0.25µm	350°C	9414.116 109	
0.32mm	0.15µm	350°C	9414.116 110	
0.32mm	0.25µm	350°C	9414.116 111	

## DN-1 MS

25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 100	
0.25mm	0.25µm	350°C	9414.116 101	
0.32mm	0.15µm	350°C	9414.116 102	
0.32mm	0.25µm	350°C	9414.116 103	

## DN-1 MS

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 112	
0.25mm	0.25µm	350°C	9414.116 113	
0.32mm	0.15µm	350°C	9414.116 114	
0.32mm	0.25µm	350°C	9414.116 115	

## DN-1 MS

30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 104	
0.25mm	0.25µm	350°C	9414.116 105	
0.32mm	0.15µm	350°C	9414.116 106	
0.32mm	0.25µm	350°C	9414.116 107	

## DN-1 MS

Technical Specifications



Every Column Individually Tested

Test Certified and Grob Mixture included in each Column

Instruction Manual included in each Column

DANI DN-1 MS Capillary Column

100% Dimethylpolysiloxane

Non-polar

Bonded and cross-linked

Inertness

Low bleeding

Good thermal stability

Similar to DB<sup>TM</sup>-1ms, HP<sup>TM</sup>-1ms, Rtx<sup>TM</sup>-1ms,  
CP-Sil<sup>TM</sup> 5 CB low bleed/ms, AT<sup>TM</sup>-1ms

Equivalent to USP G1, G2, G38

## DN-1 FAST 5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 116	
0.05mm	0.10µm	350°C	9414.116 117	
0.10mm	0.10µm	350°C	9414.116 118	
0.10mm	0.20µm	350°C	9414.116 119	

## DN-1 FAST 10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 120	
0.05mm	0.10µm	350°C	9414.116 121	
0.10mm	0.10µm	350°C	9414.116 122	
0.10mm	0.20µm	350°C	9414.116 123	

## DN-1 FAST

## Technical Specifications




Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-1 FAST Capillary Column  
 100% Dimethylpolysiloxane  
 Non-polar  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to DB<sup>TM</sup>-1, Rtx<sup>TM</sup>-1, SPB<sup>TM</sup>-1, SPB<sup>TM</sup>-Sulfur, SP<sup>TM</sup>-2100, HP<sup>TM</sup>-1, HP<sup>TM</sup>-101, ULTRA<sup>TM</sup>-1, BP<sup>TM</sup>-1, CP-Sil<sup>TM</sup> 5 CB, 007<sup>TM</sup>-1, OV<sup>TM</sup>-1, SE<sup>TM</sup>-30, DC<sup>TM</sup>-200, RSL<sup>TM</sup>-150, RSL<sup>TM</sup>-160, PE-1, ZB-1, AT<sup>TM</sup>-1

Equivalent to USP G1, G2, G38

# DN-1 FAST HT

## DN-1 FAST HT 5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 267	
0.05mm	0.10µm	380°C	9414.117 268	
0.10mm	0.10µm	380°C	9414.117 269	

## DN-1 FAST HT 10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 270	
0.05mm	0.10µm	380°C	9414.117 271	
0.10mm	0.10µm	380°C	9414.117 272	



## DN-1 FAST HT Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-1 FAST HT Capillary Column  
 100% Dimethylpolysiloxane  
 Non-polar  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to DB<sup>TM</sup>-1, Rtx<sup>TM</sup>-1, SPB<sup>TM</sup>-1, SPB<sup>TM</sup>-Sulfur, SP<sup>TM</sup>-2100, HP<sup>TM</sup>-1, HP<sup>TM</sup>-101, ULTRA<sup>TM</sup>-1, Bp<sup>TM</sup>-1, CP-Sil<sup>TM</sup> 5 CB, 007<sup>TM</sup>-1, OV<sup>TM</sup>-1, SE<sup>TM</sup>-30, DC<sup>TM</sup>-200, RSL<sup>TM</sup>-150, RSL<sup>TM</sup>-160, PE-1, ZB-1, AT<sup>TM</sup>-1

Equivalent to USP G1, G2, G38

## DN-5

## 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 125	
0.25mm	0.25µm	350°C	9414.116 126	
0.25mm	0.45µm	330°C	9414.116 127	
0.25mm	1.00µm	330°C	9414.116 128	
0.25mm	1.50µm	330°C	9414.116 129	
0.32mm	0.15µm	350°C	9414.116 130	
0.32mm	0.25µm	350°C	9414.116 131	
0.32mm	0.45µm	330°C	9414.116 132	
0.32mm	1.00µm	330°C	9414.116 133	
0.32mm	1.50µm	330°C	9414.116 134	
0.32mm	3.00µm	320°C	9414.116 135	
0.32mm	5.00µm	320°C	9414.116 136	
0.53mm	0.15µm	350°C	9414.116 137	
0.53mm	0.25µm	350°C	9414.116 138	
0.53mm	0.45µm	330°C	9414.116 139	
0.53mm	1.00µm	330°C	9414.116 140	
0.53mm	1.50µm	330°C	9414.116 141	012/017/019
0.53mm	3.00µm	320°C	9414.116 142	
0.53mm	5.00µm	320°C	9414.116 143	

## DN-5

## 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 182	
0.25mm	0.25µm	350°C	9414.116 183	
0.25mm	0.45µm	330°C	9414.116 184	
0.25mm	1.00µm	330°C	9414.116 185	
0.25mm	1.50µm	330°C	9414.116 186	
0.32mm	0.15µm	350°C	9414.116 187	
0.32mm	0.25µm	350°C	9414.116 188	
0.32mm	0.45µm	330°C	9414.116 189	
0.32mm	1.00µm	330°C	9414.116 190	
0.32mm	1.50µm	330°C	9414.116 191	
0.32mm	3.00µm	320°C	9414.116 192	
0.32mm	5.00µm	320°C	9414.116 193	
0.53mm	0.15µm	350°C	9414.116 194	
0.53mm	0.25µm	350°C	9414.116 195	
0.53mm	0.45µm	330°C	9414.116 196	
0.53mm	1.00µm	330°C	9414.116 197	
0.53mm	1.50µm	330°C	9414.116 198	
0.53mm	3.00µm	320°C	9414.116 199	
0.53mm	5.00µm	320°C	9414.116 200	

## DN-5

## 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 144	
0.25mm	0.25µm	350°C	9414.116 145	010/014/015
0.25mm	0.45µm	330°C	9414.116 146	
0.25mm	1.00µm	330°C	9414.116 147	
0.25mm	1.50µm	330°C	9414.116 148	
0.32mm	0.15µm	350°C	9414.116 149	
0.32mm	0.25µm	350°C	9414.116 150	011/013/018
0.32mm	0.45µm	330°C	9414.116 151	
0.32mm	1.00µm	330°C	9414.116 152	016
0.32mm	1.50µm	330°C	9414.116 153	
0.32mm	3.00µm	320°C	9414.116 154	
0.32mm	5.00µm	320°C	9414.116 155	
0.53mm	0.15µm	350°C	9414.116 156	
0.53mm	0.25µm	350°C	9414.116 157	
0.53mm	0.45µm	330°C	9414.116 158	
0.53mm	1.00µm	330°C	9414.116 159	
0.53mm	1.50µm	330°C	9414.116 160	
0.53mm	3.00µm	320°C	9414.116 161	
0.53mm	5.00µm	320°C	9414.116 162	

## DN-5

## 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 201	
0.25mm	0.25µm	350°C	9414.116 202	
0.25mm	0.45µm	330°C	9414.116 203	
0.25mm	1.00µm	330°C	9414.116 204	
0.25mm	1.50µm	330°C	9414.116 205	
0.32mm	0.15µm	350°C	9414.116 206	
0.32mm	0.25µm	350°C	9414.116 207	
0.32mm	0.45µm	330°C	9414.116 208	
0.32mm	1.00µm	330°C	9414.116 209	
0.32mm	1.50µm	330°C	9414.116 210	
0.32mm	3.00µm	320°C	9414.116 211	
0.32mm	5.00µm	320°C	9414.116 212	
0.53mm	0.15µm	350°C	9414.116 213	
0.53mm	0.25µm	350°C	9414.116 214	
0.53mm	0.45µm	330°C	9414.116 215	
0.53mm	1.00µm	330°C	9414.116 216	
0.53mm	1.50µm	330°C	9414.116 217	
0.53mm	3.00µm	320°C	9414.116 218	
0.53mm	5.00µm	320°C	9414.116 219	

## DN-5

## 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 163	
0.25mm	0.25µm	350°C	9414.116 164	
0.25mm	0.45µm	330°C	9414.116 165	
0.25mm	1.00µm	330°C	9414.116 166	
0.25mm	1.50µm	330°C	9414.116 167	
0.32mm	0.15µm	350°C	9414.116 168	
0.32mm	0.25µm	350°C	9414.116 169	020
0.32mm	0.45µm	330°C	9414.116 170	
0.32mm	1.00µm	330°C	9414.116 171	
0.32mm	1.50µm	330°C	9414.116 172	
0.32mm	3.00µm	320°C	9414.116 173	
0.32mm	5.00µm	320°C	9414.116 174	
0.53mm	0.15µm	350°C	9414.116 175	
0.53mm	0.25µm	350°C	9414.116 176	
0.53mm	0.45µm	330°C	9414.116 177	
0.53mm	1.00µm	330°C	9414.116 178	
0.53mm	1.50µm	330°C	9414.116 179	
0.53mm	3.00µm	320°C	9414.116 180	
0.53mm	5.00µm	320°C	9414.116 181	

## DN-5

## Technical Specifications

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

DANI DN-5 Capillary Column  
(5% Phenyl) - 95% methylpolysiloxane  
Non-polar  
Bonded and cross-linked  
Inertness  
Low bleeding  
Good thermal stability

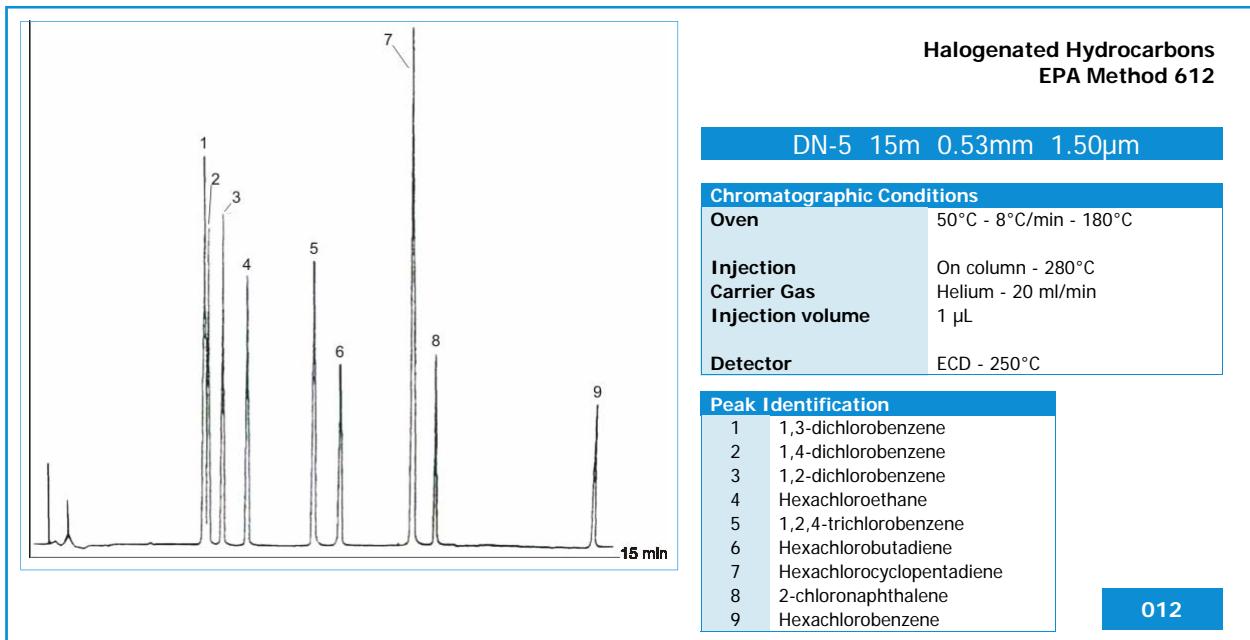
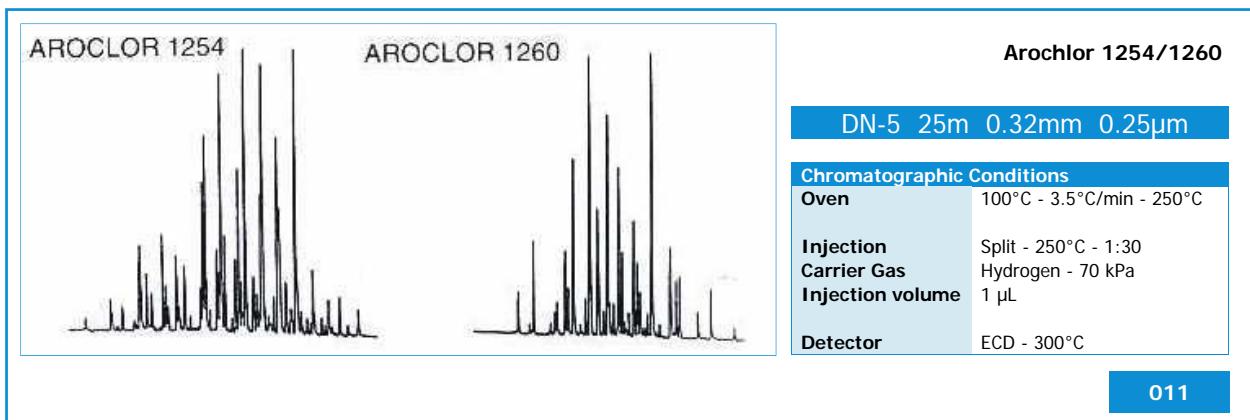
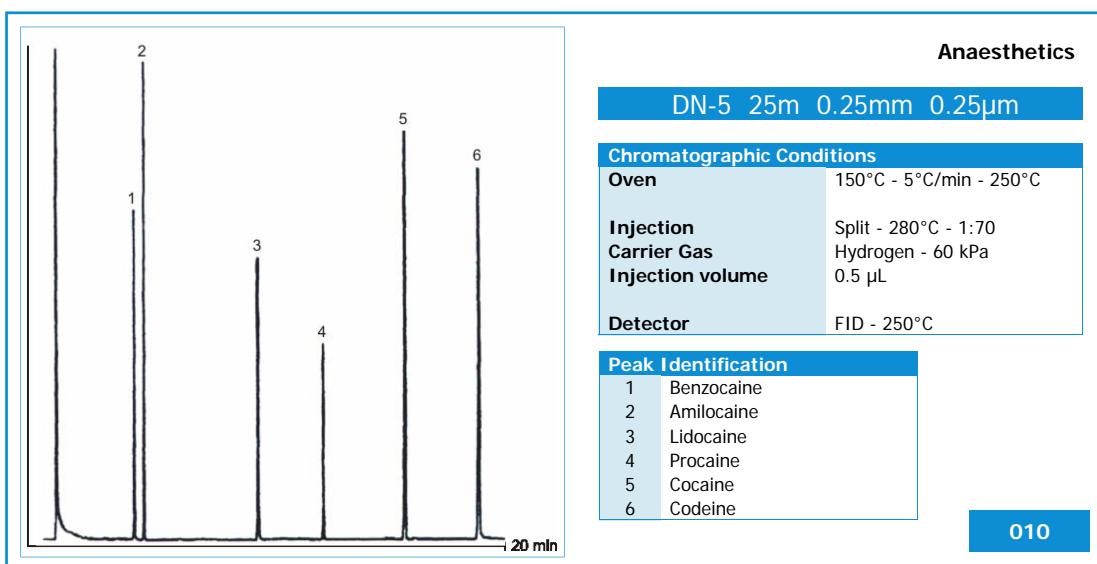
Similar to 007-2, CP-Sil 8CB, DB<sup>TM</sup>-5, DB<sup>TM</sup>-5.625, HP<sup>TM</sup>-5,  
SAC-5, OV<sup>TM</sup>-5, PTE-5, PTE-5QTM, PAS-5,  
RSL-200, Rtx<sup>TM</sup>-5, SE-54, SPB-5, ULTRA-2,  
XTI-5, SE-52, BP-5, PE-2, ZB-5, AT<sup>TM</sup>-5, EC<sup>TM</sup>-5

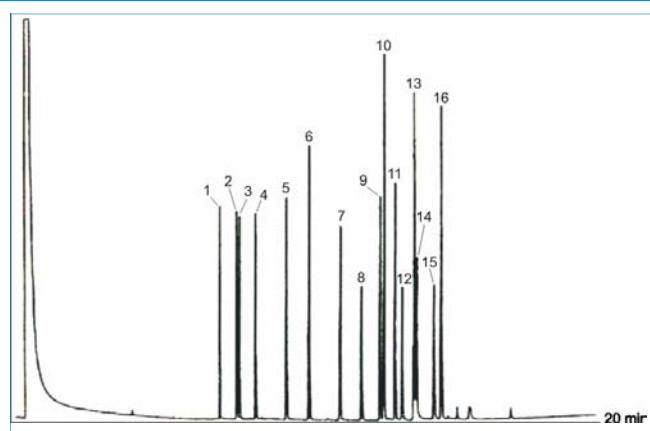
Equivalent to USP G27, G36



**DN-5**

## Chromatograms





## Organochlorinated Pesticides EPA Method 608/8081

DN-5 25m 0.32mm 0.25μm

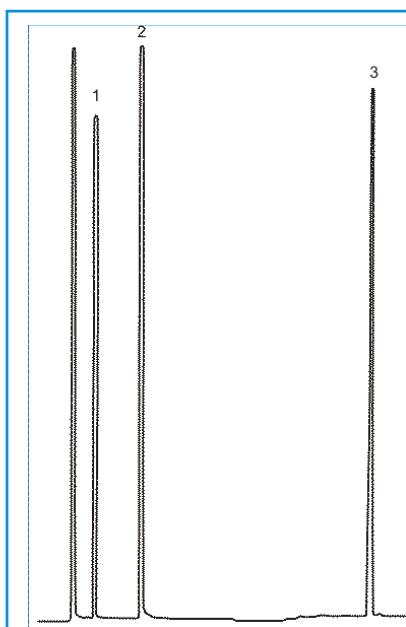
## Chromatographic Conditions

Oven	65°C - 20°C/min - 150°C - 7°C/min - 260°C
Injection	On column
Carrier Gas	Hydrogen - 60 kPa
Injection volume	1 μL
Detector	FID - 280°C

## Peak Identification

1	Alpha - BHC
2	Beta - BHC
3	Gamma - BHC
4	Delta - BHC
5	Heptachlor
6	Aldrin
7	Heptachlor epoxide
8	Endosulfan I
9	4,4' DDE
10	Dieldrin
11	Endrin
12	4,4' DDD
13	Endosulfan II
14	Endrin aldehyde
15	4,4' DDT
16	Endosulfan sulfate

013



## Pharmaceuticals

DN-5 25m 0.25mm 0.25μm

## Chromatographic Conditions

Oven	150°C - 5°C/min - 260°C
Injection	Splitless - 250°C
Carrier Gas	Hydrogen - 60 kPa
Injection volume	1 μL
Detector	FID - 280°C

## Peak Identification

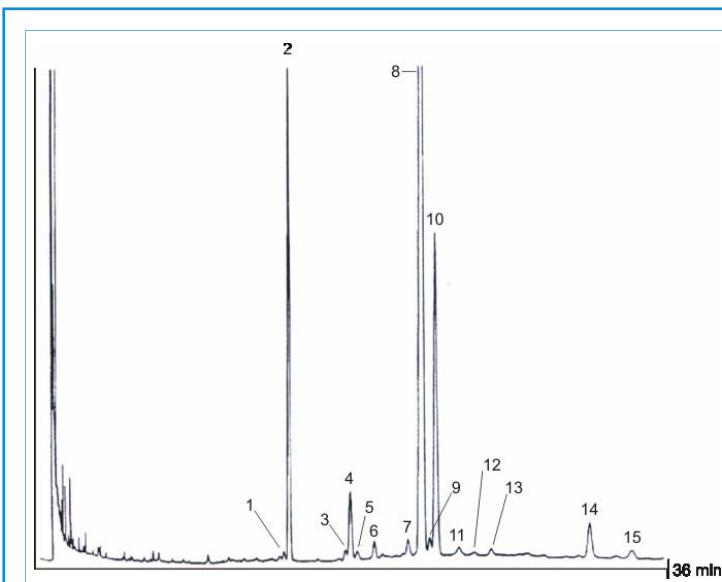
1	Amphetamine
2	Ephedrine
3	Caffeine

014



# DN-5

## Chromatograms

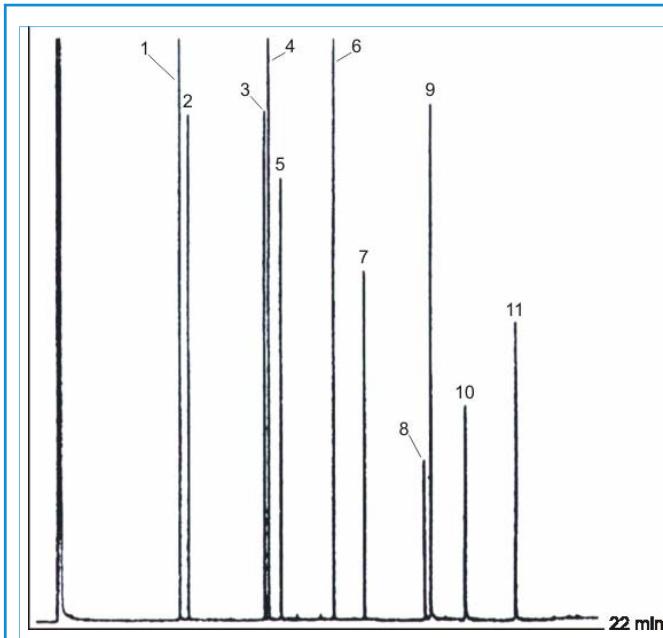
**Sterols in Olive Oil**

DN-5 25m 0.25mm 0.25µm

**Chromatographic Conditions****Oven** Isothermal - 260°C**Injection** Split - 250°C - 1:100  
**Carrier Gas** Hydrogen - 90 kPa  
**Injection volume** 1 µL**Detector** FID - 280°C**Peak Identification**

1	Cholesterol
2	Alpha Cholesterol
3	24-Methyl Cholesterol
4	Campesterol
5	Campestanol
6	Stigmasteryl
7	D5 25 stigmastadienol
8	Beta sitosterol
9	Sitostanol
10	D5 avanasterol
11	D5 24 stigmastadienol
12	D7 stigmastadienol
13	D7 avanasterol
14	Eritrodiol
15	Uvaol

015

**Phenols EPA Method 604**

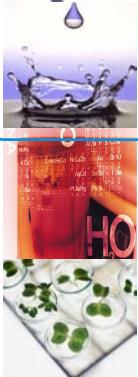
DN-5 25m 0.32mm 1.00µm

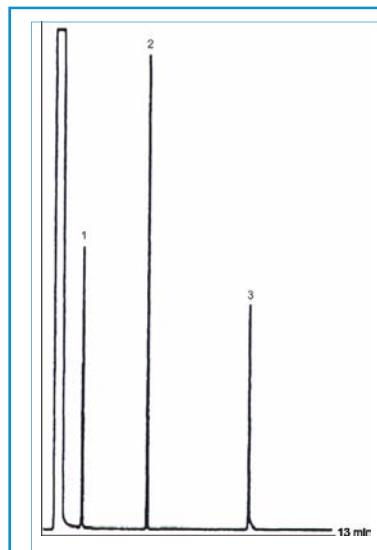
**Chromatographic Conditions****Oven** 110°C - 8°C/min - 280°C**Injection** Split - 300°C - 1:100  
**Carrier Gas** Hydrogen - 60 kPa  
**Injection volume** 1 µL**Detector** FID - 300°C**Peak Identification**

1	Phenol
2	2-chlorophenol
3	2-nitrophenol
4	2,4-dimethylphenol
5	2,4-dichlorophenol
6	4-chloro-3-methylphenol
7	2,4,6-trichlorophenol
8	2,4-dinitrophenol
9	4-nitrophenol
10	2-methyl-4,6-dinitrophenol
11	Pentachlorophenol

016





**Nitrosamines EPA Method 607**

DN-5 15m 0.53mm 1.50μm

**Chromatographic Conditions**

Oven 40°C - 20°C/min - 240°C

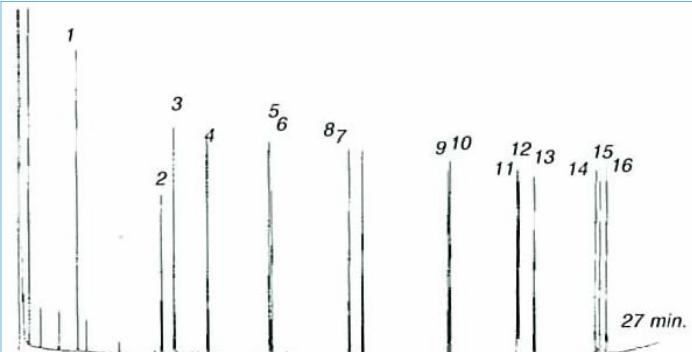
Injection On column - 240°C  
Carrier Gas Hydrogen - 10 mL/min  
Injection volume 1 μL

Detector FID - 280°C

**Peak Identification**

- |   |                           |
|---|---------------------------|
| 1 | N-Nitrosodimethylamine    |
| 2 | N-Nitrosodi-n-propylamine |
| 3 | N-Nitrosodiphenylamine    |

017

**PAH's EPA Method 610/8100**

DN-5 25m 0.32mm 0.25μm

**Chromatographic Conditions**

Oven 60°C - 4°C/min - 300°C

Injection On column  
Carrier Gas Hydrogen - 70 kPa  
Injection volume 1 μL

Detector FID - 300°C

**Peak Identification**

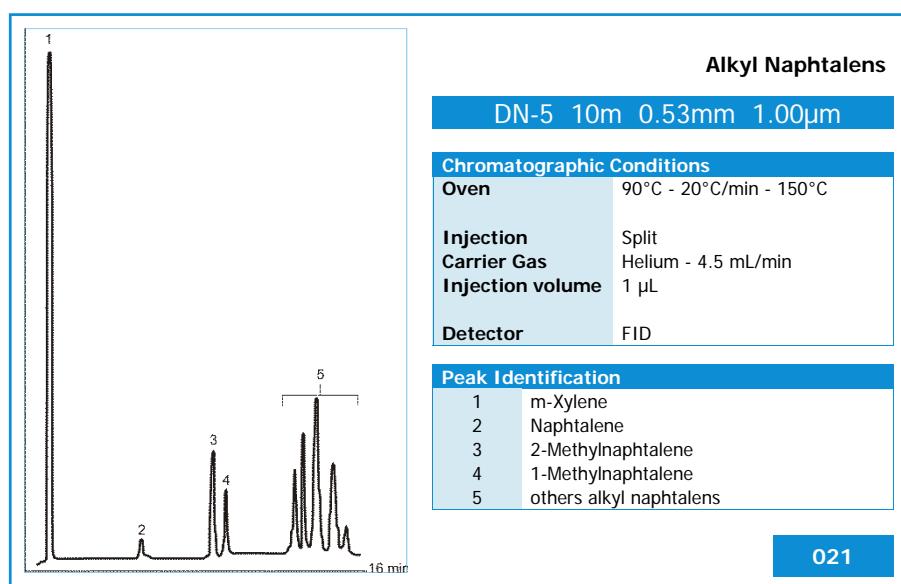
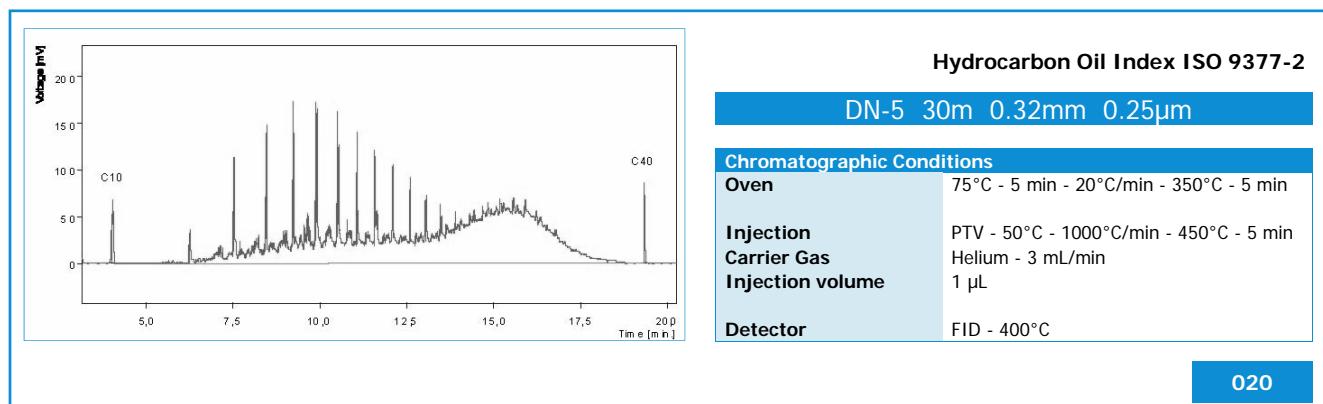
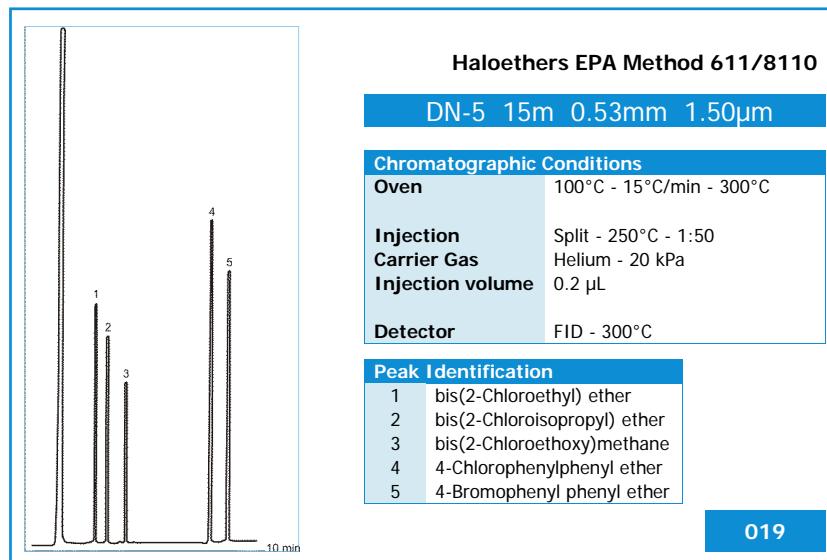
- |    |                          |
|----|--------------------------|
| 1  | Naphthalene              |
| 2  | Acenaphthylene           |
| 3  | Acenaphthene             |
| 4  | Fluorene                 |
| 5  | Phenanthrene             |
| 6  | Anthracene               |
| 7  | Fluoranthene             |
| 8  | Pyrene                   |
| 9  | Benzo (a) Anthracene     |
| 10 | Chrysene                 |
| 11 | Benzo (b) fluoranthene   |
| 12 | Benzo (k) fluoranthene   |
| 13 | Benzo (a) pyrene         |
| 14 | Indeno (1,2,3-cd) pyrene |
| 15 | Dibenzo (a,h) Anthracene |
| 16 | Benzo (ghi) perylene     |

018



**DN-5**

## Chromatograms



## DN-5 HT

15m

## DN-5 HT

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 207	
0.32mm	0.10µm	380°C	9414.117 208	
0.53mm	0.10µm	380°C	9414.117 209	

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 216	
0.32mm	0.10µm	380°C	9414.117 217	
0.53mm	0.10µm	380°C	9414.117 218	

## DN-5 HT

25m

## DN-5 HT

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 210	
0.32mm	0.10µm	380°C	9414.117 211	
0.53mm	0.10µm	380°C	9414.117 212	

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 219	
0.32mm	0.10µm	380°C	9414.117 220	
0.53mm	0.10µm	380°C	9414.117 221	

## DN-5 HT

30m

## DN-5 HT

Technical Specifications

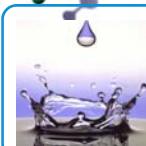
ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 213	
0.32mm	0.10µm	380°C	9414.117 214	
0.53mm	0.10µm	380°C	9414.117 215	

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

DANI DN-5 HT Capillary Column  
(5% Phenyl) - 95% methylpolysiloxane  
Non-polar  
Bonded and cross-linked  
Inertness  
Low bleeding  
Good thermal stability

Similar to 007-2, CP-Sil 8CB, DB<sup>TM</sup>-5, DB<sup>TM</sup>-5.625, HP<sup>TM</sup>-5,  
SAC-5, OV<sup>TM</sup>-5, PTE-5, PTE-5QTM, PAS-5,  
RSL-200, Rtx<sup>TM</sup>-5, SE-54, SPB-5, ULTRA-2,  
XTI-5, SE-52, BP-5, PE-2, ZB-5, AT<sup>TM</sup>-5, EC<sup>TM</sup>-5

Equivalent to USP G27, G36

# DN-5 MS

DN-5 MS				
15m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 220	
0.25mm	0.25µm	350°C	9414.116 221	
0.32mm	0.15µm	350°C	9414.116 222	
0.32mm	0.25µm	350°C	9414.116 223	

DN-5 MS				
50m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 232	
0.25mm	0.25µm	350°C	9414.116 233	
0.32mm	0.15µm	350°C	9414.116 234	
0.32mm	0.25µm	350°C	9414.116 235	

DN-5 MS				
25m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 224	
0.25mm	0.25µm	350°C	9414.116 225	
0.32mm	0.15µm	350°C	9414.116 226	
0.32mm	0.25µm	350°C	9414.116 227	

DN-5 MS				
60m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 236	
0.25mm	0.25µm	350°C	9414.116 237	
0.32mm	0.15µm	350°C	9414.116 238	
0.32mm	0.25µm	350°C	9414.116 239	

DN-5 MS				
30m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 228	
0.25mm	0.25µm	350°C	9414.116 229	
0.32mm	0.15µm	350°C	9414.116 230	
0.32mm	0.25µm	350°C	9414.116 231	

DN-5 MS		Technical Specifications
Every Column Individually Tested		
Test Certified and Grob Mixture included in each Column		
Instruction Manual included in each Column		
DANI DN-5 MS Capillary Column (5% Phenyl) - 95% methylpolysiloxane		
Non-polar		
Bonded and cross-linked		
Inertness		
Low bleeding		
Good thermal stability		
Similar to		DB <sup>TM</sup> -5ms, Rtx <sup>TM</sup> -5 sil ms, HP <sup>TM</sup> -5ms, BPX-5, 007-5ms, AT <sup>TM</sup> -5ms
Equivalent to		USP G27, G36



## DN-5 FAST

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 240	
0.05mm	0.10µm	350°C	9414.116 241	
0.10mm	0.10µm	350°C	9414.116 242	022/023/024
0.10mm	0.20µm	350°C	9414.116 243	

## DN-5 FAST

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 244	
0.05mm	0.10µm	350°C	9414.116 245	
0.10mm	0.10µm	350°C	9414.116 246	
0.10mm	0.20µm	350°C	9414.116 247	

## DN-5 FAST

15m

ID	Film	Max Temp	Code	Chroma
0.10mm	0.10µm	350°C	9414.117 301	

## DN-5 FAST

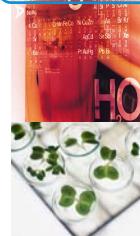
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-5 FAST Capillary Column  
 (5% Phenyl) - 95% methylpolysiloxane  
 Non-polar  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to 007-2, CP-Sil 8CB, DB<sup>TM</sup>-5, DB<sup>TM</sup>-5.625, HP<sup>TM</sup>-5,  
 SAC-5, OV<sup>TM</sup>-5, PTE-5, PTE-5QTM, PAS-5,  
 RSL-200, Rtx<sup>TM</sup>-5, SE-54, SPB-5, ULTRA-2,  
 XTI-5, SE-52, BP-5, PE-2, ZB-5, AT<sup>TM</sup>-5

Equivalent to USP G27, G36

# DN-5 FAST

## Chromatograms

### Peak Identification

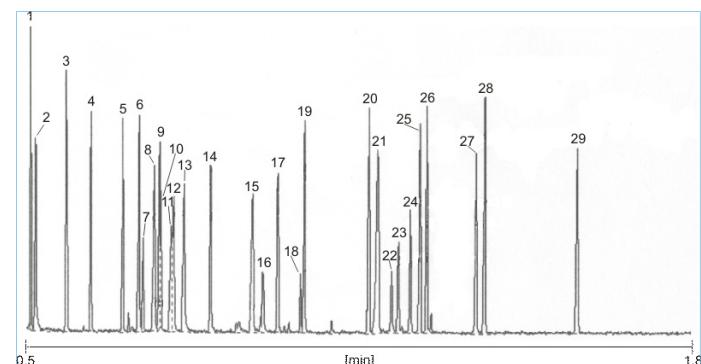
1	Benzyl Alcohol
2	Limonene
3	Linalol
4	Veratrol
5	Me-Octynoate
6	Citronellol
7	Citral 1
8	Geraniol
9	Cinnamic Ald.
10	Citral 2
11	Anisic Alcohol
12	OH-Citronellal
13	Cinnamic Alcohol
14	Eugenol
15	Coumarine
16	Isoeugenol
17	$\alpha$ Iso Me-Ionone
18	$\alpha$ Me-Ionone
19	Lilial
20	Farnesol 1
21	Lyrat 1 + Lyrat 2
22	Farnesol 1
23	Farnesol 2
24	Farnesol 3
25	Amyl Cynamal
26	Hexyl Cynamal
27	Bz. Salsilate
28	1-Ph-Decanone
29	Bz. Cynamate

### Allergens

DN-5 FAST 5m 0.10mm 0.10μm

### Chromatographic Conditions

Oven	50°C - 0.1 min - 15°C/min 250°C - 5 min
Injection	Split - 230°C - 1:200
Carrier Gas	Hydrogen - 0.5 ml/min
Injection volume	1 μL
Detector	FID - 250°C



Courtesy of Prof. C. Bicchi, C. Brunelli  
Università di Torino - Dipartimento Scienza e Tecnologia del Farmaco  
Via P. Giuria, 9 - Torino - ITALY

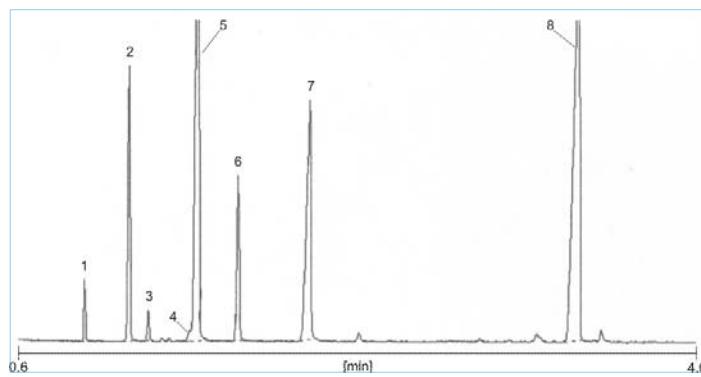
022

### Bergamot

DN-5 FAST 5m 0.10mm 0.10μm

### Chromatographic Conditions

Oven	50°C - 0.1 min - 15°C/min - 250°C - 5 min
Injection	Split - 230°C - 1:200
Carrier Gas	Hydrogen - 0.5 ml/min
Injection volume	1 μL
Detector	FID - 250°C



Peak Identification
1 $\alpha$ -Pinene
2 $\beta$ -Pinene
3 Myrcene
4 p-Cimene
5 Limonene
6 $\gamma$ -Terpinene
7 Linalol
8 Linalyl Acetate

Courtesy of Prof. C. Bicchi, C. Brunelli  
Università di Torino - Dipartimento Scienza e Tecnologia del Farmaco  
Via P. Giuria, 9 - Torino - ITALY

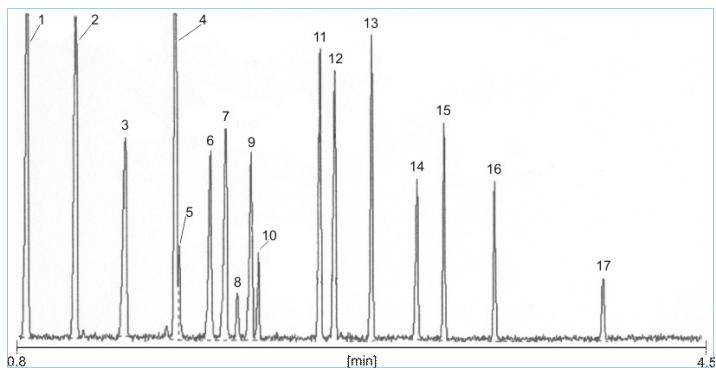
023

## Pesticides

DN-5 FAST 5m 0.10mm 0.10µm

## Chromatographic Conditions

Oven	50°C - 0.1 min - 15°C/min - 250°C - 5 min
Injection	Split - 230°C - 1:200
Carrier Gas	Hydrogen - 0.5 ml/min
Injection volume	1 µL
Detector	FID - 250°C

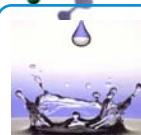


Courtesy of Prof. C. Bicchi, C. Brunelli  
 Università di Torino - Dipartimento Scienza e Tecnologia del Farmaco  
 Via P. Giuria, 9 - Torino - ITALY

## Peak Identification

1	α-HCH
2	γ-HCH
3	Chlorotalonil
4	Heptachlor
5	Parathion-Me
6	Paraoxon-E
7	Malathion
8	Fenitrothion
9	Parathion-Et
10	/
11	Chlordane-Trans
12	Chlordane-Cis + α-End.
13	Dieldrin
14	β-Endosulfan
15	o,p'-DDT
16	p,p'-DDT
17	Tetradifon

024



# DN-5 FAST HT

## DN-5 FAST HT 5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 273	
0.05mm	0.10µm	380°C	9414.117 274	
0.10mm	0.10µm	380°C	9414.117 275	

## DN-5 FAST HT 10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 276	
0.05mm	0.10µm	380°C	9414.117 277	
0.10mm	0.10µm	380°C	9414.117 278	



## DN-5 FAST HT Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-5 FAST HT Capillary Column  
 (5% Phenyl) - 95% methylpolysiloxane  
 Non-polar  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to 007-2, CP-Sil 8CB, DB<sup>TM</sup>-5, DB<sup>TM</sup>-5.625, HP<sup>TM</sup>-5,  
 SAC-5, OV<sup>TM</sup>-5, PTE-5, PTE-5QTM, PAS-5,  
 RSL-200, Rtx<sup>TM</sup>-5, SE-54, SPB-5, ULTRA-2,  
 XTI-5, SE-52, BP-5, PE-2, ZB-5, AT<sup>TM</sup>-5

Equivalent to USP G27, G36

## DN-20

## 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 248	
0.25mm	0.25µm	320°C	9414.116 249	
0.25mm	0.45µm	300°C	9414.116 250	
0.25mm	1.00µm	280°C	9414.116 251	
0.32mm	0.15µm	350°C	9414.116 252	
0.32mm	0.25µm	320°C	9414.116 253	
0.32mm	0.45µm	300°C	9414.116 254	
0.32mm	1.00µm	280°C	9414.116 255	
0.32mm	1.50µm	280°C	9414.116 256	
0.32mm	3.00µm	280°C	9414.116 257	
0.53mm	0.15µm	350°C	9414.116 258	
0.53mm	0.25µm	320°C	9414.116 259	
0.53mm	0.45µm	300°C	9414.116 260	
0.53mm	1.00µm	280°C	9414.116 261	
0.53mm	1.50µm	280°C	9414.116 262	
0.53mm	3.00µm	280°C	9414.116 263	

## DN-20

## 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 296	
0.25mm	0.25µm	320°C	9414.116 297	
0.25mm	0.45µm	300°C	9414.116 298	
0.25mm	1.00µm	280°C	9414.116 299	
0.32mm	0.15µm	350°C	9414.116 300	
0.32mm	0.25µm	320°C	9414.116 301	
0.32mm	0.45µm	300°C	9414.116 302	
0.32mm	1.00µm	280°C	9414.116 303	
0.32mm	1.50µm	280°C	9414.116 304	
0.32mm	3.00µm	280°C	9414.116 305	
0.53mm	0.15µm	350°C	9414.116 306	
0.53mm	0.25µm	320°C	9414.116 307	
0.53mm	0.45µm	300°C	9414.116 308	
0.53mm	1.00µm	280°C	9414.116 309	
0.53mm	1.50µm	280°C	9414.116 310	
0.53mm	3.00µm	280°C	9414.116 311	

## DN-20

## 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 264	
0.25mm	0.25µm	320°C	9414.116 265	
0.25mm	0.45µm	300°C	9414.116 266	
0.25mm	1.00µm	280°C	9414.116 267	
0.32mm	0.15µm	350°C	9414.116 268	
0.32mm	0.25µm	320°C	9414.116 269	
0.32mm	0.45µm	300°C	9414.116 270	
0.32mm	1.00µm	280°C	9414.116 271	
0.32mm	1.50µm	280°C	9414.116 272	
0.32mm	3.00µm	280°C	9414.116 273	
0.53mm	0.15µm	350°C	9414.116 274	
0.53mm	0.25µm	320°C	9414.116 275	
0.53mm	0.45µm	300°C	9414.116 276	
0.53mm	1.00µm	280°C	9414.116 277	
0.53mm	1.50µm	280°C	9414.116 278	
0.53mm	3.00µm	280°C	9414.116 279	

## DN-20

## 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 312	
0.25mm	0.25µm	320°C	9414.116 313	
0.25mm	0.45µm	300°C	9414.116 314	
0.25mm	1.00µm	280°C	9414.116 315	
0.32mm	0.15µm	350°C	9414.116 316	
0.32mm	0.25µm	320°C	9414.116 317	
0.32mm	0.45µm	300°C	9414.116 318	
0.32mm	1.00µm	280°C	9414.116 319	
0.32mm	1.50µm	280°C	9414.116 320	
0.32mm	3.00µm	280°C	9414.116 321	
0.53mm	0.15µm	350°C	9414.116 322	
0.53mm	0.25µm	320°C	9414.116 323	
0.53mm	0.45µm	300°C	9414.116 324	
0.53mm	1.00µm	280°C	9414.116 325	
0.53mm	1.50µm	280°C	9414.116 326	
0.53mm	3.00µm	280°C	9414.116 327	

## DN-20

## 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 280	
0.25mm	0.25µm	320°C	9414.116 281	
0.25mm	0.45µm	300°C	9414.116 282	
0.25mm	1.00µm	280°C	9414.116 283	
0.32mm	0.15µm	350°C	9414.116 284	
0.32mm	0.25µm	320°C	9414.116 285	
0.32mm	0.45µm	300°C	9414.116 286	
0.32mm	1.00µm	280°C	9414.116 287	
0.32mm	1.50µm	280°C	9414.116 288	
0.32mm	3.00µm	280°C	9414.116 289	
0.53mm	0.15µm	350°C	9414.116 290	
0.53mm	0.25µm	320°C	9414.116 291	
0.53mm	0.45µm	300°C	9414.116 292	
0.53mm	1.00µm	280°C	9414.116 293	
0.53mm	1.50µm	280°C	9414.116 294	
0.53mm	3.00µm	280°C	9414.116 295	

## DN-20

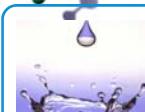
## Technical Specifications

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

DANI DN-20 Capillary Column  
(20% Phenyl) - 80% methylpolysiloxane  
Intermediate Polarity  
Bonded and cross-linked  
Inertness  
Low bleeding  
Good thermal stability

Similar to Rtx™-20, SPB™-20, 007™-7, VOCOL, PE-7,  
AT™-20, EC™-20

Equivalent to USP G28, G32



# DN-20 HT

## DN-20 HT 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 252	
0.32mm	0.10µm	380°C	9414.117 253	
0.53mm	0.10µm	380°C	9414.117 254	

## DN-20 HT 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 261	
0.32mm	0.10µm	380°C	9414.117 262	
0.53mm	0.10µm	380°C	9414.117 263	

## DN-20 HT 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 255	
0.32mm	0.10µm	380°C	9414.117 256	
0.53mm	0.10µm	380°C	9414.117 257	

## DN-20 HT 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 264	
0.32mm	0.10µm	380°C	9414.117 265	
0.53mm	0.10µm	380°C	9414.117 266	

## DN-20 HT 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 258	
0.32mm	0.10µm	380°C	9414.117 259	
0.53mm	0.10µm	380°C	9414.117 260	

## DN-20 HT

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-20 HT Capillary Column  
 (20% Phenyl) - 80% methylpolysiloxane  
 Intermediate Polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to Rtx™-20, SPB™-20, 007™-7, VOCOL, PE-7, AT™-20, EC™-20

Equivalent to USP G28, G32

## DN-20 FAST HT

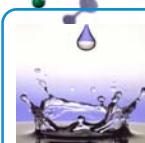
## DN-20 FAST HT 5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 291	
0.05mm	0.10µm	380°C	9414.117 292	
0.10mm	0.10µm	380°C	9414.117 293	

## DN-20 FAST HT 10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 294	
0.05mm	0.10µm	380°C	9414.117 295	
0.10mm	0.10µm	380°C	9414.117 296	

## DN-20 FAST HT Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-20 FAST HT Capillary Column  
 (20% Phenyl) - 80% methylpolysiloxane  
 Intermediate Polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to Rtx™-20, SPB™-20, 007™-7, VOCOL, PE-7,  
 AT™-20, EC™-20

Equivalent to USP G28, G32

# DN-17

## DN-17

15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 328	
0.25mm	0.25µm	320°C	9414.116 329	
0.25mm	0.45µm	310°C	9414.116 330	
0.25mm	1.00µm	300°C	9414.116 331	
0.32mm	0.15µm	320°C	9414.116 332	
0.32mm	0.25µm	320°C	9414.116 333	
0.32mm	0.45µm	310°C	9414.116 334	
0.32mm	1.00µm	300°C	9414.116 335	
0.53mm	0.15µm	320°C	9414.116 336	
0.53mm	0.25µm	320°C	9414.116 337	
0.53mm	0.45µm	310°C	9414.116 338	
0.53mm	1.00µm	300°C	9414.116 339	

## DN-17

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 364	
0.25mm	0.25µm	320°C	9414.116 365	
0.25mm	0.45µm	310°C	9414.116 366	
0.25mm	1.00µm	300°C	9414.116 367	
0.32mm	0.15µm	320°C	9414.116 368	
0.32mm	0.25µm	320°C	9414.116 369	
0.32mm	0.45µm	310°C	9414.116 370	
0.32mm	1.00µm	300°C	9414.116 371	
0.53mm	0.15µm	320°C	9414.116 372	
0.53mm	0.25µm	320°C	9414.116 373	
0.53mm	0.45µm	310°C	9414.116 374	
0.53mm	1.00µm	300°C	9414.116 375	

## DN-17

25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 340	
0.25mm	0.25µm	320°C	9414.116 341	
0.25mm	0.45µm	310°C	9414.116 342	
0.25mm	1.00µm	300°C	9414.116 343	
0.32mm	0.15µm	320°C	9414.116 344	
0.32mm	0.25µm	320°C	9414.116 345	
0.32mm	0.45µm	310°C	9414.116 346	
0.32mm	1.00µm	300°C	9414.116 347	
0.53mm	0.15µm	320°C	9414.116 348	
0.53mm	0.25µm	320°C	9414.116 349	
0.53mm	0.45µm	310°C	9414.116 350	
0.53mm	1.00µm	300°C	9414.116 351	

## DN-17

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 376	
0.25mm	0.25µm	320°C	9414.116 377	
0.25mm	0.45µm	310°C	9414.116 378	
0.25mm	1.00µm	300°C	9414.116 379	
0.32mm	0.15µm	320°C	9414.116 380	
0.32mm	0.25µm	320°C	9414.116 381	
0.32mm	0.45µm	310°C	9414.116 382	
0.32mm	1.00µm	300°C	9414.116 383	
0.53mm	0.15µm	320°C	9414.116 384	
0.53mm	0.25µm	320°C	9414.116 385	
0.53mm	0.45µm	310°C	9414.116 386	
0.53mm	1.00µm	300°C	9414.116 387	

## DN-17

30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 352	
0.25mm	0.25µm	320°C	9414.116 353	
0.25mm	0.45µm	310°C	9414.116 354	
0.25mm	1.00µm	300°C	9414.116 355	
0.32mm	0.15µm	320°C	9414.116 356	
0.32mm	0.25µm	320°C	9414.116 357	
0.32mm	0.45µm	310°C	9414.116 358	
0.32mm	1.00µm	300°C	9414.116 359	
0.53mm	0.15µm	320°C	9414.116 360	
0.53mm	0.25µm	320°C	9414.116 361	
0.53mm	0.45µm	310°C	9414.116 362	
0.53mm	1.00µm	300°C	9414.116 363	

## DN-17

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-17 Capillary Column  
 (50% Phenyl) - 50% methylpolysiloxane  
 Intermediate Polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to      HP<sup>TM</sup>-50+, Rtx<sup>TM</sup>-50, SP-2250, SPB-50, SPB-17,  
 BPX-50, Rtx-65TG, BPX-50, CP-TAB-CB, 007-17,  
 DB-17, HP<sup>TM</sup>-17, SP-50, CP Sil 24CB, PE-17,  
 ZB-50, AT<sup>TM</sup>-50

Equivalent to    USP G3



## DN-17 HT

15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 237	
0.32mm	0.10µm	380°C	9414.117 238	
0.53mm	0.10µm	380°C	9414.117 239	

## DN-17 HT

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 246	
0.32mm	0.10µm	380°C	9414.117 247	
0.53mm	0.10µm	380°C	9414.117 248	

## DN-17 HT

25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 240	
0.32mm	0.10µm	380°C	9414.117 241	
0.53mm	0.10µm	380°C	9414.117 242	

## DN-17 HT

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 249	
0.32mm	0.10µm	380°C	9414.117 250	
0.53mm	0.10µm	380°C	9414.117 251	

## DN-17 HT

30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 243	
0.32mm	0.10µm	380°C	9414.117 244	
0.53mm	0.10µm	380°C	9414.117 245	

## DN-17 HT

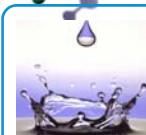
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-17 HT Capillary Column  
 (50% Phenyl) - 50% methylpolysiloxane  
 Intermediate Polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to HP<sup>TM</sup>-50+, Rtx<sup>TM</sup>-50, SP-2250, SPB-50, SPB-17, BPX-50, Rtx-65TG, BPX-50, CP-TAB-CB, 007-17, DB-17, HP<sup>TM</sup>-17, SP-50, CP Sil 24CB, PE-17, ZB-50, AT<sup>TM</sup>-50

Equivalent to USP G3

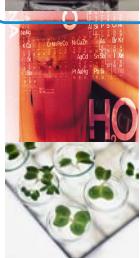
# DN-17 FAST

## DN-17 FAST 5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 388	
0.05mm	0.10µm	350°C	9414.116 389	
0.10mm	0.10µm	350°C	9414.116 390	
0.10mm	0.20µm	350°C	9414.116 391	

## DN-17 FAST 10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 392	
0.05mm	0.10µm	350°C	9414.116 393	
0.10mm	0.10µm	350°C	9414.116 394	
0.10mm	0.20µm	350°C	9414.116 395	



## DN-17 FAST

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-17 FAST Capillary Column  
 (50% Phenyl) - 50% methylpolysiloxane  
 Intermediate Polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to      HP<sup>TM</sup>-50+, Rtx<sup>TM</sup>-50, SP-2250, SPB-50, SPB-17,  
 BPX-50, Rtx-65TG, BPX-50, CP-TAB-CB, 007-17,  
 DB-17, HP<sup>TM</sup>-17, SP-50, CP Sil 24CB, PE-17,  
 ZB-50, AT<sup>TM</sup>-50

Equivalent to USP G3

## DN-17 FAST HT

## DN-17 FAST HT 5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 285	
0.05mm	0.10µm	380°C	9414.117 286	
0.10mm	0.10µm	380°C	9414.117 287	

## DN-17 FAST HT 10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 288	
0.05mm	0.10µm	380°C	9414.117 289	
0.10mm	0.10µm	380°C	9414.117 290	

## DN-17 FAST HT

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-17 FAST HT Capillary Column  
 (50% Phenyl) - 50% methylpolysiloxane  
 Intermediate Polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to      HP<sup>TM</sup>-50+, Rtx<sup>TM</sup>-50, SP-2250, SPB-50, SPB-17,  
 BPX-50, Rtx-65TG, BPX-50, CP-TAB-CB, 007-17,  
 DB-17, HP<sup>TM</sup>-17, SP-50, CP Sil 24CB, PE-17,  
 ZB-50, AT<sup>TM</sup>-50

Equivalent to USP G3



# DN-624

## DN-624

15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 396	
0.25mm	0.25µm	280°C	9414.116 397	
0.25mm	0.45µm	270°C	9414.116 398	
0.25mm	1.00µm	260°C	9414.116 399	
0.25mm	1.50µm	250°C	9414.116 400	
0.32mm	0.15µm	280°C	9414.116 401	
0.32mm	0.25µm	280°C	9414.116 402	
0.32mm	0.45µm	270°C	9414.116 403	
0.32mm	1.00µm	260°C	9414.116 404	
0.32mm	1.50µm	250°C	9414.116 405	
0.32mm	3.00µm	240°C	9414.116 406	
0.53mm	0.15µm	280°C	9414.116 407	
0.53mm	0.25µm	280°C	9414.116 408	
0.53mm	0.45µm	270°C	9414.116 409	
0.53mm	1.00µm	260°C	9414.116 410	
0.53mm	1.50µm	250°C	9414.116 411	
0.53mm	3.00µm	240°C	9414.116 412	

## DN-624

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 447	
0.25mm	0.25µm	280°C	9414.116 448	
0.25mm	0.45µm	270°C	9414.116 449	
0.25mm	1.00µm	260°C	9414.116 450	
0.25mm	1.50µm	250°C	9414.116 451	
0.32mm	0.15µm	280°C	9414.116 452	
0.32mm	0.25µm	280°C	9414.116 453	
0.32mm	0.45µm	270°C	9414.116 454	
0.32mm	1.00µm	260°C	9414.116 455	
0.32mm	1.50µm	250°C	9414.116 456	
0.32mm	3.00µm	240°C	9414.116 457	
0.53mm	0.15µm	280°C	9414.116 458	
0.53mm	0.25µm	280°C	9414.116 459	
0.53mm	0.45µm	270°C	9414.116 460	
0.53mm	1.00µm	260°C	9414.116 461	
0.53mm	1.50µm	250°C	9414.116 462	
0.53mm	3.00µm	240°C	9414.116 463	

## DN-624

25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 413	
0.25mm	0.25µm	280°C	9414.116 414	
0.25mm	0.45µm	270°C	9414.116 415	
0.25mm	1.00µm	260°C	9414.116 416	
0.25mm	1.50µm	250°C	9414.116 417	
0.32mm	0.15µm	280°C	9414.116 418	
0.32mm	0.25µm	280°C	9414.116 419	
0.32mm	0.45µm	270°C	9414.116 420	
0.32mm	1.00µm	260°C	9414.116 421	
0.32mm	1.50µm	250°C	9414.116 422	
0.32mm	3.00µm	240°C	9414.116 423	
0.53mm	0.15µm	280°C	9414.116 424	
0.53mm	0.25µm	280°C	9414.116 425	
0.53mm	0.45µm	270°C	9414.116 426	
0.53mm	1.00µm	260°C	9414.116 427	
0.53mm	1.50µm	250°C	9414.116 428	
0.53mm	3.00µm	240°C	9414.116 429	

## DN-624

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 464	
0.25mm	0.25µm	280°C	9414.116 465	
0.25mm	0.45µm	270°C	9414.116 466	
0.25mm	1.00µm	260°C	9414.116 467	
0.25mm	1.50µm	250°C	9414.116 468	
0.32mm	0.15µm	280°C	9414.116 469	
0.32mm	0.25µm	280°C	9414.116 470	
0.32mm	0.45µm	270°C	9414.116 471	
0.32mm	1.00µm	260°C	9414.116 472	
0.32mm	1.50µm	250°C	9414.116 473	
0.32mm	3.00µm	240°C	9414.116 474	
0.53mm	0.15µm	280°C	9414.116 475	
0.53mm	0.25µm	280°C	9414.116 476	
0.53mm	0.45µm	270°C	9414.116 477	
0.53mm	1.00µm	260°C	9414.116 478	
0.53mm	1.50µm	250°C	9414.116 479	
0.53mm	3.00µm	240°C	9414.116 480	

## DN-624

30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 430	
0.25mm	0.25µm	280°C	9414.116 431	
0.25mm	0.45µm	270°C	9414.116 432	
0.25mm	1.00µm	260°C	9414.116 433	
0.25mm	1.50µm	250°C	9414.116 434	
0.32mm	0.15µm	280°C	9414.116 435	
0.32mm	0.25µm	280°C	9414.116 436	
0.32mm	0.45µm	270°C	9414.116 437	
0.32mm	1.00µm	260°C	9414.116 438	
0.32mm	1.50µm	250°C	9414.116 439	
0.32mm	3.00µm	240°C	9414.116 440	
0.53mm	0.15µm	280°C	9414.116 441	
0.53mm	0.25µm	280°C	9414.116 442	
0.53mm	0.45µm	270°C	9414.116 443	
0.53mm	1.00µm	260°C	9414.116 444	
0.53mm	1.50µm	250°C	9414.116 445	
0.53mm	3.00µm	240°C	9414.116 446	

## DN-624

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-624 Capillary Column  
 (3.5% Cyanopropyl, 3.5% Phenyl) - 93% methylpolysiloxane  
 Intermediate Polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to 007-1301, DB<sup>TM</sup>-624, DB<sup>TM</sup>-1301, HP<sup>TM</sup>-1301,  
 HP<sup>TM</sup>-624, Rtx<sup>TM</sup>-1301, Rtx<sup>TM</sup>-624, SPB-1301,  
 SPB-624, 007-624, ZB-624, AT<sup>TM</sup>-624,  
 AT<sup>TM</sup>-1301

Equivalent to USP G43



## DN-1701

15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 481	
0.25mm	0.25µm	280°C	9414.116 482	
0.25mm	0.45µm	280°C	9414.116 483	
0.25mm	1.00µm	280°C	9414.116 484	
0.25mm	1.50µm	280°C	9414.116 485	
0.32mm	0.15µm	280°C	9414.116 486	
0.32mm	0.25µm	280°C	9414.116 487	
0.32mm	0.45µm	280°C	9414.116 488	
0.32mm	1.00µm	280°C	9414.116 489	
0.32mm	1.50µm	280°C	9414.116 490	
0.53mm	0.15µm	280°C	9414.116 491	
0.53mm	0.25µm	280°C	9414.116 492	
0.53mm	0.45µm	280°C	9414.116 493	
0.53mm	1.00µm	280°C	9414.116 494	
0.53mm	1.50µm	280°C	9414.116 495	

## DN-1701

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 526	
0.25mm	0.25µm	280°C	9414.116 527	
0.25mm	0.45µm	280°C	9414.116 528	
0.25mm	1.00µm	280°C	9414.116 529	
0.25mm	1.50µm	280°C	9414.116 530	
0.32mm	0.15µm	280°C	9414.116 531	
0.32mm	0.25µm	280°C	9414.116 532	
0.32mm	0.45µm	280°C	9414.116 533	
0.32mm	1.00µm	280°C	9414.116 534	
0.32mm	1.50µm	280°C	9414.116 535	
0.53mm	0.15µm	280°C	9414.116 536	
0.53mm	0.25µm	280°C	9414.116 537	
0.53mm	0.45µm	280°C	9414.116 538	
0.53mm	1.00µm	280°C	9414.116 539	
0.53mm	1.50µm	280°C	9414.116 540	

## DN-1701

25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 496	
0.25mm	0.25µm	280°C	9414.116 497	025
0.25mm	0.45µm	280°C	9414.116 498	
0.25mm	1.00µm	280°C	9414.116 499	
0.25mm	1.50µm	280°C	9414.116 500	
0.32mm	0.15µm	280°C	9414.116 501	
0.32mm	0.25µm	280°C	9414.116 502	
0.32mm	0.45µm	280°C	9414.116 503	
0.32mm	1.00µm	280°C	9414.116 504	
0.32mm	1.50µm	280°C	9414.116 505	
0.53mm	0.15µm	280°C	9414.116 506	
0.53mm	0.25µm	280°C	9414.116 507	
0.53mm	0.45µm	280°C	9414.116 508	
0.53mm	1.00µm	280°C	9414.116 509	
0.53mm	1.50µm	280°C	9414.116 510	

## DN-1701

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 541	
0.25mm	0.25µm	280°C	9414.116 542	
0.25mm	0.45µm	280°C	9414.116 543	
0.25mm	1.00µm	280°C	9414.116 544	
0.25mm	1.50µm	280°C	9414.116 545	
0.32mm	0.15µm	280°C	9414.116 546	
0.32mm	0.25µm	280°C	9414.116 547	
0.32mm	0.45µm	280°C	9414.116 548	
0.32mm	1.00µm	280°C	9414.116 549	
0.32mm	1.50µm	280°C	9414.116 550	
0.53mm	0.15µm	280°C	9414.116 551	
0.53mm	0.25µm	280°C	9414.116 552	
0.53mm	0.45µm	280°C	9414.116 553	
0.53mm	1.00µm	280°C	9414.116 554	
0.53mm	1.50µm	280°C	9414.116 555	

## DN-1701

30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 511	
0.25mm	0.25µm	280°C	9414.116 512	
0.25mm	0.45µm	280°C	9414.116 513	
0.25mm	1.00µm	280°C	9414.116 514	
0.25mm	1.50µm	280°C	9414.116 515	
0.32mm	0.15µm	280°C	9414.116 516	
0.32mm	0.25µm	280°C	9414.116 517	
0.32mm	0.45µm	280°C	9414.116 518	
0.32mm	1.00µm	280°C	9414.116 519	
0.32mm	1.50µm	280°C	9414.116 520	
0.53mm	0.15µm	280°C	9414.116 521	
0.53mm	0.25µm	280°C	9414.116 522	
0.53mm	0.45µm	280°C	9414.116 523	
0.53mm	1.00µm	280°C	9414.116 524	
0.53mm	1.50µm	280°C	9414.116 525	

## DN-1701

Technical Specifications

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

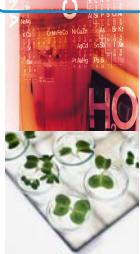
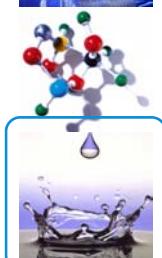
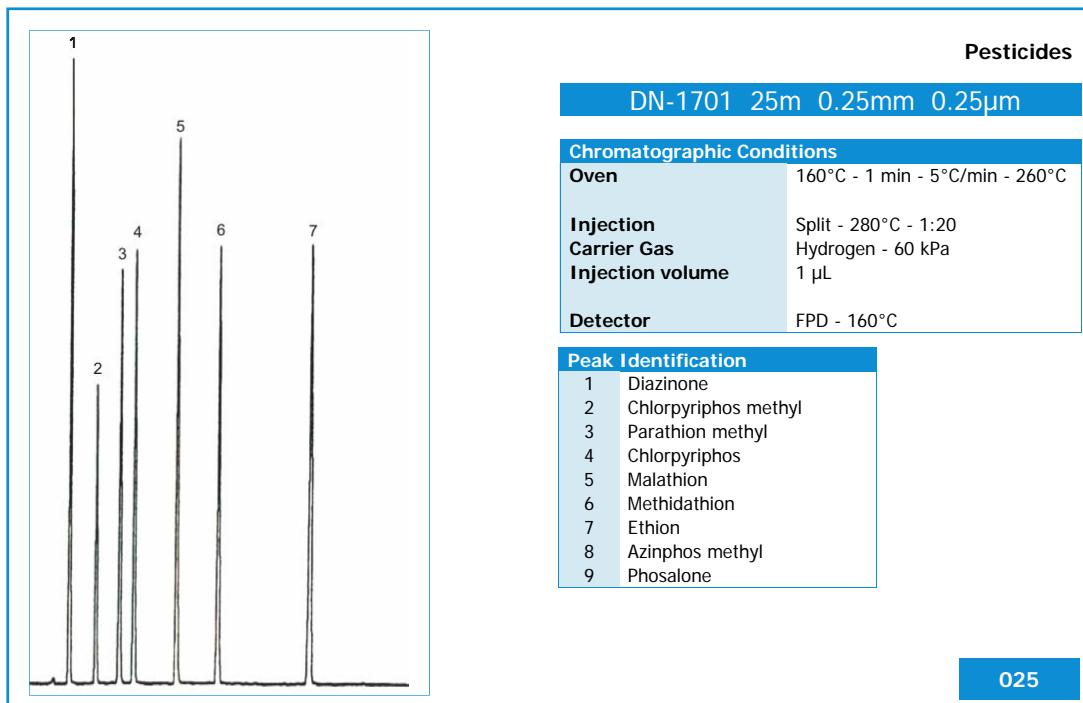
DANI DN-1701 Capillary Column  
(7% Cyanopropyl 7% Phenyl) - 86% methylpolysiloxane  
Intermediate Polarity  
Bonded and cross-linked  
Inertness  
Low bleeding  
Good thermal stability

Similar to 007-1701, CP-Sil 19CB, DB-1701, HP<sup>TM</sup>-1701,  
OV<sup>TM</sup>-1701, PAS-1701, Rtx<sup>TM</sup>-1701, SPB-1701,  
BP-10, ZB-1701, AT<sup>TM</sup>-1701



# DN-1701

## Chromatograms



## DN-1701 FAST

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 556	
0.05mm	0.10µm	350°C	9414.116 557	
0.10mm	0.10µm	350°C	9414.116 558	026/027/028
0.10mm	0.20µm	350°C	9414.116 559	

## DN-1701 FAST

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 560	
0.05mm	0.10µm	350°C	9414.116 561	
0.10mm	0.10µm	350°C	9414.116 562	
0.10mm	0.20µm	350°C	9414.116 563	

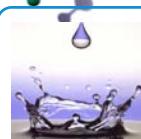
## DN-1701 FAST

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

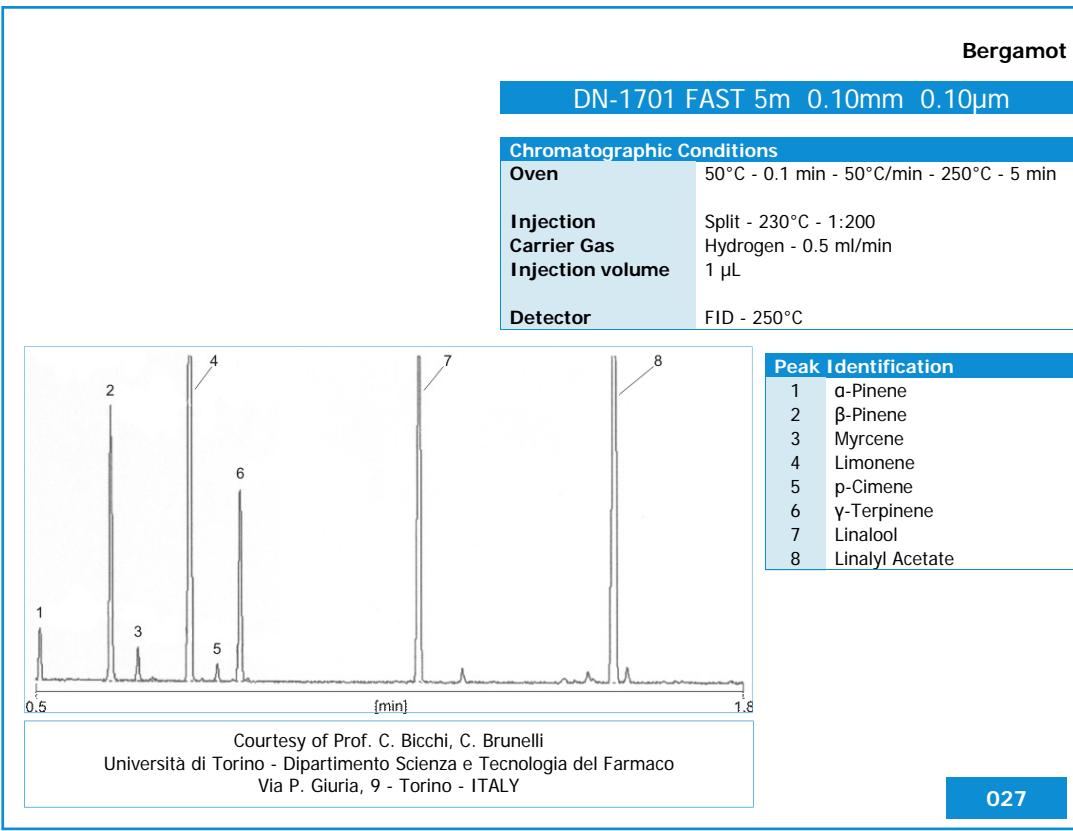
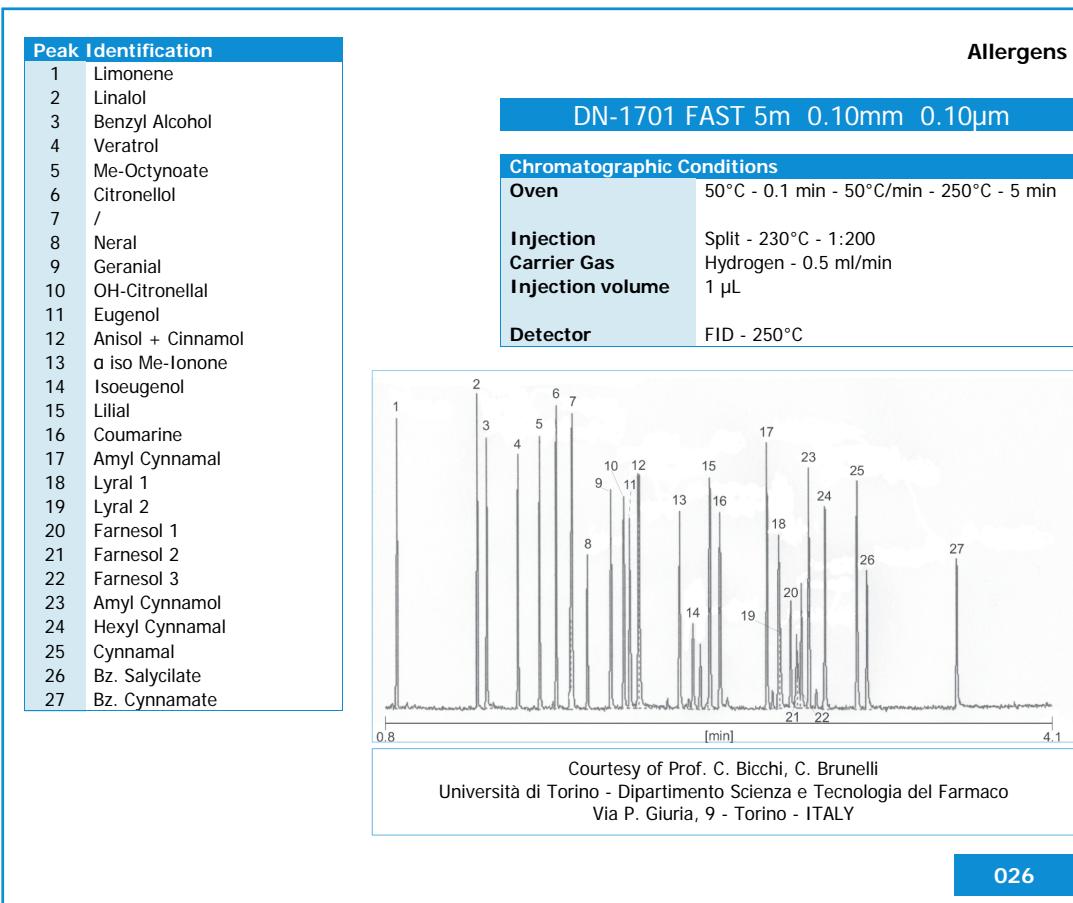
DANI DN-1701 FAST Capillary Column  
 (7% Cyanopropyl 7% Phenyl) - 86% methylpolysiloxane  
 Intermediate Polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to 007-1701, CP-Sil 19CB, DB-1701, HP<sup>TM</sup>-1701,  
 OV<sup>TM</sup>-1701, PAS-1701, Rtx<sup>TM</sup>-1701, SPB-1701,  
 BP-10, ZB-1701, AT<sup>TM</sup>-1701

# DN-1701 FAST

## Chromatograms



## DN-1701 FAST

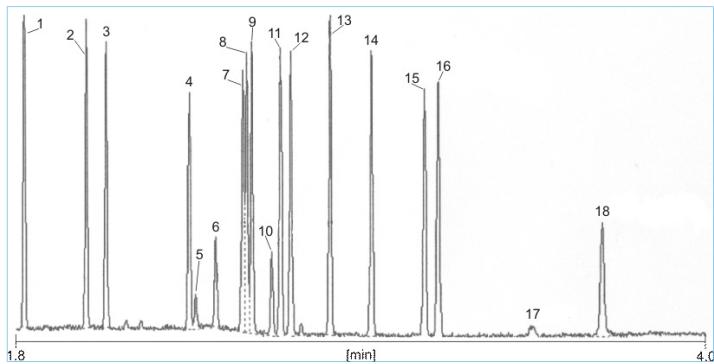
Chromatograms

## Pesticides

DN-1701 FAST 5m 0.10mm 0.10 $\mu$ m

## Chromatographic Conditions

Oven	50°C - 0.1 min - 50°C/min - 250°C - 5 min
Injection	Split - 230°C - 1:200
Carrier Gas	Hydrogen - 0.5 ml/min
Injection volume	1 $\mu$ L
Detector	FID - 250°C

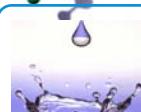


Courtesy of Prof. C. Bicchi, C. Brunelli  
 Università di Torino - Dipartimento Scienza e Tecnologia del Farmaco  
 Via P. Giuria, 9 - Torino - ITALY

## Peak Identification

1	$\alpha$ -HCH
2	$\gamma$ -HCH
3	/
4	/
5	$\alpha,p'$ -DDT
6	$p,p'$ -DDT
7	/
8	Heptachlor
9	Chlorotalonil
10	Parathion-Me
11	Malathion
12	Fenotrothion
13	Parathion-Et
14	Fenitrothion
15	Chlordane-Cis + Trans
16	Dieldrin
17	$\beta$ -Endosulfan
18	Tetradifon

028



# DN-200

## DN-200

## 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 564	
0.25mm	0.25µm	320°C	9414.116 565	
0.25mm	0.45µm	300°C	9414.116 566	
0.25mm	1.00µm	280°C	9414.116 567	
0.32mm	0.15µm	350°C	9414.116 568	
0.32mm	0.25µm	320°C	9414.116 569	
0.32mm	0.45µm	300°C	9414.116 570	
0.32mm	1.00µm	280°C	9414.116 571	
0.32mm	1.50µm	280°C	9414.116 572	
0.53mm	0.15µm	350°C	9414.116 573	
0.53mm	0.25µm	320°C	9414.116 574	
0.53mm	0.45µm	300°C	9414.116 575	
0.53mm	1.00µm	280°C	9414.116 576	
0.53mm	1.50µm	280°C	9414.116 577	
0.53mm	3.00µm	280°C	9414.116 578	

## DN-200

## 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 609	
0.25mm	0.25µm	320°C	9414.116 610	
0.25mm	0.45µm	300°C	9414.116 611	
0.25mm	1.00µm	280°C	9414.116 612	
0.32mm	0.15µm	350°C	9414.116 613	
0.32mm	0.25µm	320°C	9414.116 614	
0.32mm	0.45µm	300°C	9414.116 615	
0.32mm	1.00µm	280°C	9414.116 616	
0.32mm	1.50µm	280°C	9414.116 617	
0.53mm	0.15µm	350°C	9414.116 618	
0.53mm	0.25µm	320°C	9414.116 619	
0.53mm	0.45µm	300°C	9414.116 620	
0.53mm	1.00µm	280°C	9414.116 621	
0.53mm	1.50µm	280°C	9414.116 622	
0.53mm	3.00µm	280°C	9414.116 623	

## DN-200

## 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 579	
0.25mm	0.25µm	320°C	9414.116 580	
0.25mm	0.45µm	300°C	9414.116 581	
0.25mm	1.00µm	280°C	9414.116 582	
0.32mm	0.15µm	350°C	9414.116 583	
0.32mm	0.25µm	320°C	9414.116 584	
0.32mm	0.45µm	300°C	9414.116 585	
0.32mm	1.00µm	280°C	9414.116 586	
0.32mm	1.50µm	280°C	9414.116 587	
0.53mm	0.15µm	350°C	9414.116 588	
0.53mm	0.25µm	320°C	9414.116 589	
0.53mm	0.45µm	300°C	9414.116 590	
0.53mm	1.00µm	280°C	9414.116 591	
0.53mm	1.50µm	280°C	9414.116 592	
0.53mm	3.00µm	280°C	9414.116 593	

## DN-200

## 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 624	
0.25mm	0.25µm	320°C	9414.116 625	
0.25mm	0.45µm	300°C	9414.116 626	
0.25mm	1.00µm	280°C	9414.116 627	
0.32mm	0.15µm	350°C	9414.116 628	
0.32mm	0.25µm	320°C	9414.116 629	
0.32mm	0.45µm	300°C	9414.116 630	
0.32mm	1.00µm	280°C	9414.116 631	
0.32mm	1.50µm	280°C	9414.116 632	
0.53mm	0.15µm	350°C	9414.116 633	
0.53mm	0.25µm	320°C	9414.116 634	
0.53mm	0.45µm	300°C	9414.116 635	
0.53mm	1.00µm	280°C	9414.116 636	
0.53mm	1.50µm	280°C	9414.116 637	
0.53mm	3.00µm	280°C	9414.116 638	

## DN-200

## 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.116 594	
0.25mm	0.25µm	320°C	9414.116 595	
0.25mm	0.45µm	300°C	9414.116 596	
0.25mm	1.00µm	280°C	9414.116 597	
0.32mm	0.15µm	350°C	9414.116 598	
0.32mm	0.25µm	320°C	9414.116 599	
0.32mm	0.45µm	300°C	9414.116 600	
0.32mm	1.00µm	280°C	9414.116 601	
0.32mm	1.50µm	280°C	9414.116 602	
0.53mm	0.15µm	350°C	9414.116 603	
0.53mm	0.25µm	320°C	9414.116 604	
0.53mm	0.45µm	300°C	9414.116 605	
0.53mm	1.00µm	280°C	9414.116 606	
0.53mm	1.50µm	280°C	9414.116 607	
0.53mm	3.00µm	280°C	9414.116 608	

## DN-200

## Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-200 Capillary Column  
 Trifluoropropyl-methylpolysiloxane  
 Polar  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to DB<sup>TM</sup>-210, RSL-400, Rtx<sup>TM</sup>-200, OV<sup>TM</sup>-202,  
 OV<sup>TM</sup>-210, OV<sup>TM</sup>-215, QF-1, SP-2401, AT<sup>TM</sup>-210

Equivalent to USP G6



## DN-200 FAST

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 639	
0.05mm	0.10µm	350°C	9414.116 640	
0.10mm	0.10µm	350°C	9414.116 641	
0.10mm	0.20µm	350°C	9414.116 642	

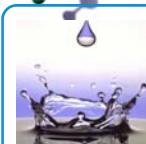
## DN-200 FAST

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 643	
0.05mm	0.10µm	350°C	9414.116 644	
0.10mm	0.10µm	350°C	9414.116 645	
0.10mm	0.20µm	350°C	9414.116 646	

## DN-200 FAST

Technical Specifications



Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-200 FAST Capillary Column  
 Trifluoropropyl-methylpolysiloxane  
 Polar  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to DB<sup>TM</sup>-210, RSL-400, Rtx<sup>TM</sup>-200, OV<sup>TM</sup>-202,  
 OV<sup>TM</sup>-210, OV<sup>TM</sup>-215, QF-1, SP-2401, AT<sup>TM</sup>-210

Equivalent to USP G6

# DN-225

DN-225				
15m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 647	
0.25mm	0.25µm	280°C	9414.116 648	
0.25mm	0.45µm	280°C	9414.116 649	
0.25mm	1.00µm	280°C	9414.116 650	
0.25mm	1.50µm	280°C	9414.116 651	
0.32mm	0.15µm	280°C	9414.116 652	
0.32mm	0.25µm	280°C	9414.116 653	
0.32mm	0.45µm	280°C	9414.116 654	
0.32mm	1.00µm	280°C	9414.116 655	
0.32mm	1.50µm	280°C	9414.116 656	
0.53mm	0.15µm	280°C	9414.116 657	
0.53mm	0.25µm	280°C	9414.116 658	
0.53mm	0.45µm	280°C	9414.116 659	
0.53mm	1.00µm	280°C	9414.116 660	
0.53mm	1.50µm	280°C	9414.116 661	

DN-225				
50m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 692	
0.25mm	0.25µm	280°C	9414.116 693	
0.25mm	0.45µm	280°C	9414.116 694	
0.25mm	1.00µm	280°C	9414.116 695	
0.25mm	1.50µm	280°C	9414.116 696	
0.32mm	0.15µm	280°C	9414.116 697	
0.32mm	0.25µm	280°C	9414.116 698	
0.32mm	0.45µm	280°C	9414.116 699	
0.32mm	1.00µm	280°C	9414.116 700	
0.32mm	1.50µm	280°C	9414.116 701	
0.53mm	0.15µm	280°C	9414.116 702	
0.53mm	0.25µm	280°C	9414.116 703	
0.53mm	0.45µm	280°C	9414.116 704	
0.53mm	1.00µm	280°C	9414.116 705	
0.53mm	1.50µm	280°C	9414.116 706	

DN-225				
25m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 662	
0.25mm	0.25µm	280°C	9414.116 663	
0.25mm	0.45µm	280°C	9414.116 664	
0.25mm	1.00µm	280°C	9414.116 665	
0.25mm	1.50µm	280°C	9414.116 666	
0.32mm	0.15µm	280°C	9414.116 667	
0.32mm	0.25µm	280°C	9414.116 668	
0.32mm	0.45µm	280°C	9414.116 669	
0.32mm	1.00µm	280°C	9414.116 670	
0.32mm	1.50µm	280°C	9414.116 671	
0.53mm	0.15µm	280°C	9414.116 672	
0.53mm	0.25µm	280°C	9414.116 673	
0.53mm	0.45µm	280°C	9414.116 674	
0.53mm	1.00µm	280°C	9414.116 675	
0.53mm	1.50µm	280°C	9414.116 676	

DN-225				
60m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 707	
0.25mm	0.25µm	280°C	9414.116 708	
0.25mm	0.45µm	280°C	9414.116 709	
0.25mm	1.00µm	280°C	9414.116 710	
0.25mm	1.50µm	280°C	9414.116 711	
0.32mm	0.15µm	280°C	9414.116 712	
0.32mm	0.25µm	280°C	9414.116 713	
0.32mm	0.45µm	280°C	9414.116 714	
0.32mm	1.00µm	280°C	9414.116 715	
0.32mm	1.50µm	280°C	9414.116 716	
0.53mm	0.15µm	280°C	9414.116 717	
0.53mm	0.25µm	280°C	9414.116 718	
0.53mm	0.45µm	280°C	9414.116 719	
0.53mm	1.00µm	280°C	9414.116 720	
0.53mm	1.50µm	280°C	9414.116 721	

DN-225				
30m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.116 677	
0.25mm	0.25µm	280°C	9414.116 678	
0.25mm	0.45µm	280°C	9414.116 679	
0.25mm	1.00µm	280°C	9414.116 680	
0.25mm	1.50µm	280°C	9414.116 681	
0.32mm	0.15µm	280°C	9414.116 682	
0.32mm	0.25µm	280°C	9414.116 683	
0.32mm	0.45µm	280°C	9414.116 684	
0.32mm	1.00µm	280°C	9414.116 685	
0.32mm	1.50µm	280°C	9414.116 686	
0.53mm	0.15µm	280°C	9414.116 687	
0.53mm	0.25µm	280°C	9414.116 688	
0.53mm	0.45µm	280°C	9414.116 689	
0.53mm	1.00µm	280°C	9414.116 690	
0.53mm	1.50µm	280°C	9414.116 691	

DN-225				
Technical Specifications				
Every Column Individually Tested				
Test Certified and Grob Mixture included in each Column				
Instruction Manual included in each Column				
DANI DN-225 Capillary Column				
(50% Cyanopropylphenyl) - 50% methylpolysiloxane				
Mid to High polarity				
Bonded				
Inertness				
Low bleeding				
Good thermal stability				
Similar to	007-225, CP-Sil43CB, DB <sup>TM</sup> -225, HP <sup>TM</sup> -225, OV <sup>TM</sup> -225, RSL-500,Rtx <sup>TM</sup> -225, BP-225, PE-225, AT <sup>TM</sup> -225			
Equivalent to	USP G7			



## DN-225 FAST

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	280°C	9414.116 722	
0.05mm	0.10µm	280°C	9414.116 723	
0.10mm	0.10µm	280°C	9414.116 724	
0.10mm	0.20µm	280°C	9414.116 725	

## DN-225 FAST

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	280°C	9414.116 726	
0.05mm	0.10µm	280°C	9414.116 727	
0.10mm	0.10µm	280°C	9414.116 728	
0.10mm	0.20µm	280°C	9414.116 729	

## DN-225 FAST

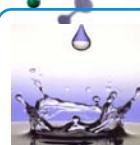
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-225 FAST Capillary Column  
 (50% Cyanopropylphenyl) - 50% methylpolysiloxane  
 Mid to High polarity  
 Bonded  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to 007-225, CP-SiI43CB, DB<sup>TM</sup>-225, HP<sup>TM</sup>-225,  
 OV<sup>TM</sup>-225, RSL-500,Rtx<sup>TM</sup>-225, BP-225, PE-225,  
 AT<sup>TM</sup>-225

Equivalent to USP G7



# DN-50

## DN-50

## 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 730	
0.32mm	0.25µm	260°C	9414.116 731	
0.53mm	0.25µm	260°C	9414.116 732	

## DN-50

## 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 739	
0.32mm	0.25µm	260°C	9414.116 740	
0.53mm	0.25µm	260°C	9414.116 741	

## DN-50

## 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 733	
0.32mm	0.25µm	260°C	9414.116 734	
0.53mm	0.25µm	260°C	9414.116 735	

## DN-50

## 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 742	
0.32mm	0.25µm	260°C	9414.116 743	
0.53mm	0.25µm	260°C	9414.116 744	

## DN-50

## 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 736	
0.32mm	0.25µm	260°C	9414.116 737	
0.53mm	0.25µm	260°C	9414.116 738	

## DN-50

## Technical Specifications

### Every Column Individually Tested

Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

DANI DN-50 Capillary Column

(50% Cyanopropyl) - 50% methylpolysiloxane

High polarity

Bonded

Inertness

Low bleeding

Good thermal stability

Similar to DB<sup>TM</sup>-23, 007-23, PE-23, Rtx<sup>TM</sup>-2330, SP 2330, AT<sup>TM</sup>-SILAR

Equivalent to USP G5




## DN-50 FAST

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	260°C	9414.116 745	
0.05mm	0.10µm	260°C	9414.116 746	
0.10mm	0.10µm	260°C	9414.116 747	
0.10mm	0.20µm	260°C	9414.116 748	

## DN-50 FAST

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	260°C	9414.116 749	
0.05mm	0.10µm	260°C	9414.116 750	
0.10mm	0.10µm	260°C	9414.116 751	
0.10mm	0.20µm	260°C	9414.116 752	

## DN-50 FAST

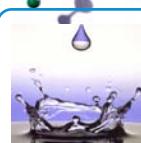
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-50 FAST Capillary Column  
 (50% Cyanopropyl) - 50% methylpolysiloxane  
 High polarity  
 Bonded  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to DB<sup>TM</sup>-23, 007-23, PE-23, Rtx<sup>TM</sup>-2330, SP 2330,  
 AT<sup>TM</sup>-SILAR

Equivalent to USP G5



# DN-WAX

## DN-WAX

## 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 753	
0.25mm	0.25µm	250°C	9414.116 754	
0.25mm	0.45µm	250°C	9414.116 755	
0.25mm	1.00µm	250°C	9414.116 756	
0.32mm	0.15µm	250°C	9414.116 757	
0.32mm	0.25µm	250°C	9414.116 758	
0.32mm	0.45µm	250°C	9414.116 759	
0.32mm	1.00µm	250°C	9414.116 760	
0.53mm	0.15µm	250°C	9414.116 761	
0.53mm	0.25µm	250°C	9414.116 762	
0.53mm	0.45µm	250°C	9414.116 763	
0.53mm	1.00µm	250°C	9414.116 764	

## DN-WAX

## 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 789	
0.25mm	0.25µm	250°C	9414.116 790	
0.25mm	0.45µm	250°C	9414.116 791	
0.25mm	1.00µm	250°C	9414.116 792	
0.32mm	0.15µm	250°C	9414.116 793	
0.32mm	0.25µm	250°C	9414.116 794	
0.32mm	0.45µm	250°C	9414.116 795	
0.32mm	1.00µm	250°C	9414.116 796	
0.53mm	0.15µm	250°C	9414.116 797	
0.53mm	0.25µm	250°C	9414.116 798	
0.53mm	0.45µm	250°C	9414.116 799	
0.53mm	1.00µm	250°C	9414.116 800	

## DN-WAX

## 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 765	
0.25mm	0.25µm	250°C	9414.116 766	035
0.25mm	0.45µm	250°C	9414.116 767	
0.25mm	1.00µm	250°C	9414.116 768	
0.32mm	0.15µm	250°C	9414.116 769	
0.32mm	0.25µm	250°C	9414.116 770	029/031/033
0.32mm	0.45µm	250°C	9414.116 771	
0.32mm	1.00µm	250°C	9414.116 772	032
0.53mm	0.15µm	250°C	9414.116 773	
0.53mm	0.25µm	250°C	9414.116 774	
0.53mm	0.45µm	250°C	9414.116 775	
0.53mm	1.00µm	250°C	9414.116 776	030

## DN-WAX

## 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 801	
0.25mm	0.25µm	250°C	9414.116 802	
0.25mm	0.45µm	250°C	9414.116 803	
0.25mm	1.00µm	250°C	9414.116 804	
0.32mm	0.15µm	250°C	9414.116 805	
0.32mm	0.25µm	250°C	9414.116 806	
0.32mm	0.45µm	250°C	9414.116 807	
0.32mm	1.00µm	250°C	9414.116 808	
0.53mm	0.15µm	250°C	9414.116 809	
0.53mm	0.25µm	250°C	9414.116 810	
0.53mm	0.45µm	250°C	9414.116 811	
0.53mm	1.00µm	250°C	9414.116 812	

## DN-WAX

## 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 777	
0.25mm	0.25µm	250°C	9414.116 778	
0.25mm	0.45µm	250°C	9414.116 779	
0.25mm	1.00µm	250°C	9414.116 780	
0.32mm	0.15µm	250°C	9414.116 781	
0.32mm	0.25µm	250°C	9414.116 782	034
0.32mm	0.45µm	250°C	9414.116 783	
0.32mm	1.00µm	250°C	9414.116 784	
0.53mm	0.15µm	250°C	9414.116 785	
0.53mm	0.25µm	250°C	9414.116 786	
0.53mm	0.45µm	250°C	9414.116 787	
0.53mm	1.00µm	250°C	9414.116 788	062

## DN-WAX

## Technical Specifications




Every Column Individually Tested

Test Certified and Grob Mixture included in each Column

Instruction Manual included in each Column

DANI DN-WAX Capillary Column

Polyethyleneglycol

Polar

Bonded and cross-linked

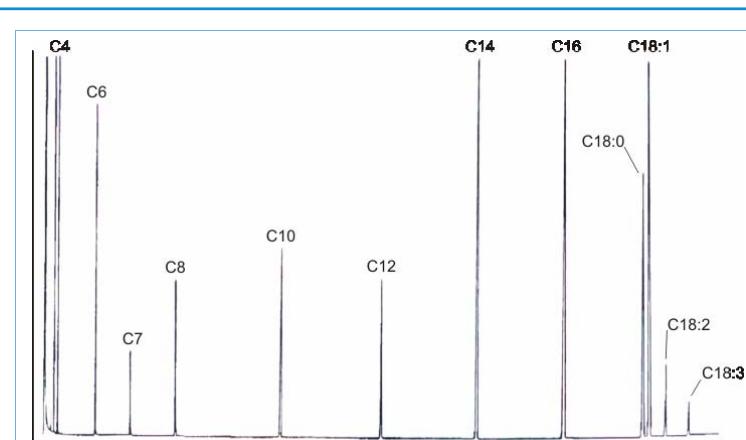
Inertness

Low bleeding

Good thermal stability

Similar to 007-CW, Carbowax® 20M, CP-Wax 52CB, DB™-WAX, Rtx™-WAX, HP-20M, HP™-Wax, Innowax™, Omegawax, Stabilwax®, SUPELCOWAX®-10, SUPEROX® II, BP-20, ZB-WAX, AT™-WAX, EC™-WAX

Equivalent to USP G14, G15, G16, G20, G39



## Fatty Acid Methyl Esters (FAME) C4-C18:3

DN-WAX 25m 0.32mm 0.25µm

## Chromatographic Conditions

Oven 50°C - 4°C/min - 210°C

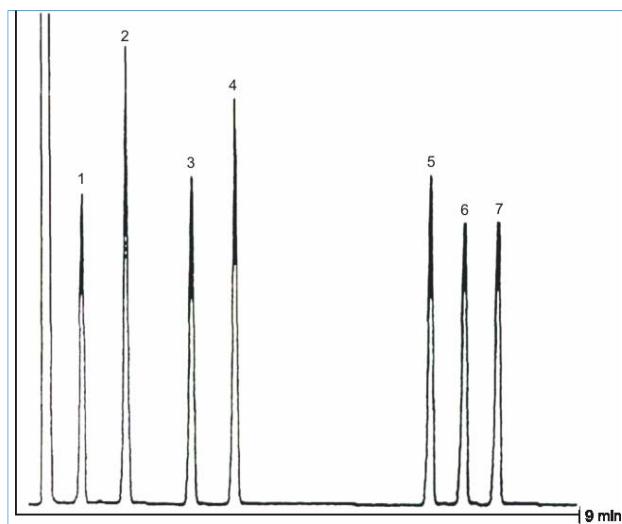
Injection Split - 250°C - 1:50  
Carrier Gas Hydrogen - 60 kPa  
Injection volume 1 µL

Detector FID - 250°C

## Peak Identification

- 1 Butyric Acid ME
- 2 Caproic Acid ME
- 3 Heptanoic Acid ME
- 4 Caprylic Acid ME
- 5 Decanoic Acid ME
- 6 Lauric Acid ME
- 7 Myristic Acid ME
- 8 Palmitic Acid ME
- 9 Stearic Acid ME
- 10 Oleic Acid ME
- 11 Linoleic Acid ME
- 12 Linolenic Acid ME

029



## Aromatics - EPA Method 602

DN-WAX 25m 0.53mm 1.00µm

## Chromatographic Conditions

Oven 50°C - 8°C/min - 120°C

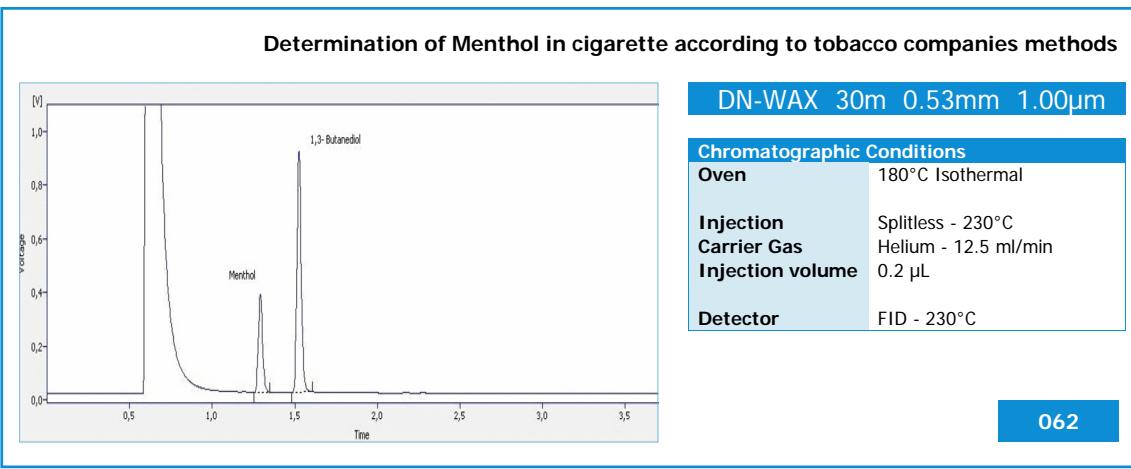
Injection Splitless - 250°C  
Carrier Gas Helium - 20 kPa  
Injection volume 1 µL

Detector FID - 250°C

## Peak Identification

- 1 Benzene
- 2 Toluene
- 3 Ethylbenzene
- 4 Chlorobenzene
- 5 1,3-Dichlorobenzene
- 6 1,4-Dichlorobenzene
- 7 1,2-Dichlorobenzene

030



## Determination of Menthol in cigarette according to tobacco companies methods

DN-WAX 30m 0.53mm 1.00µm

## Chromatographic Conditions

Oven 180°C Isothermal

Injection Splitless - 230°C  
Carrier Gas Helium - 12.5 ml/min  
Injection volume 0.2 µL

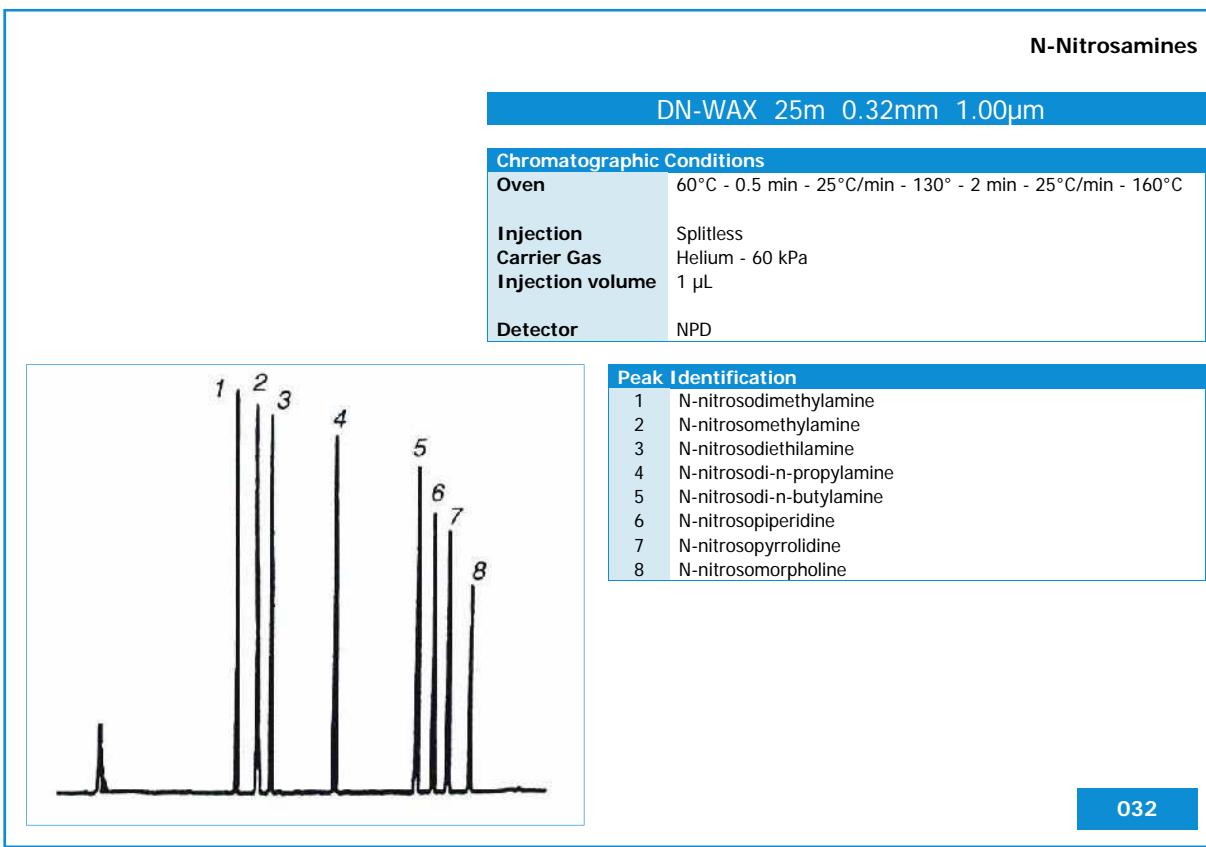
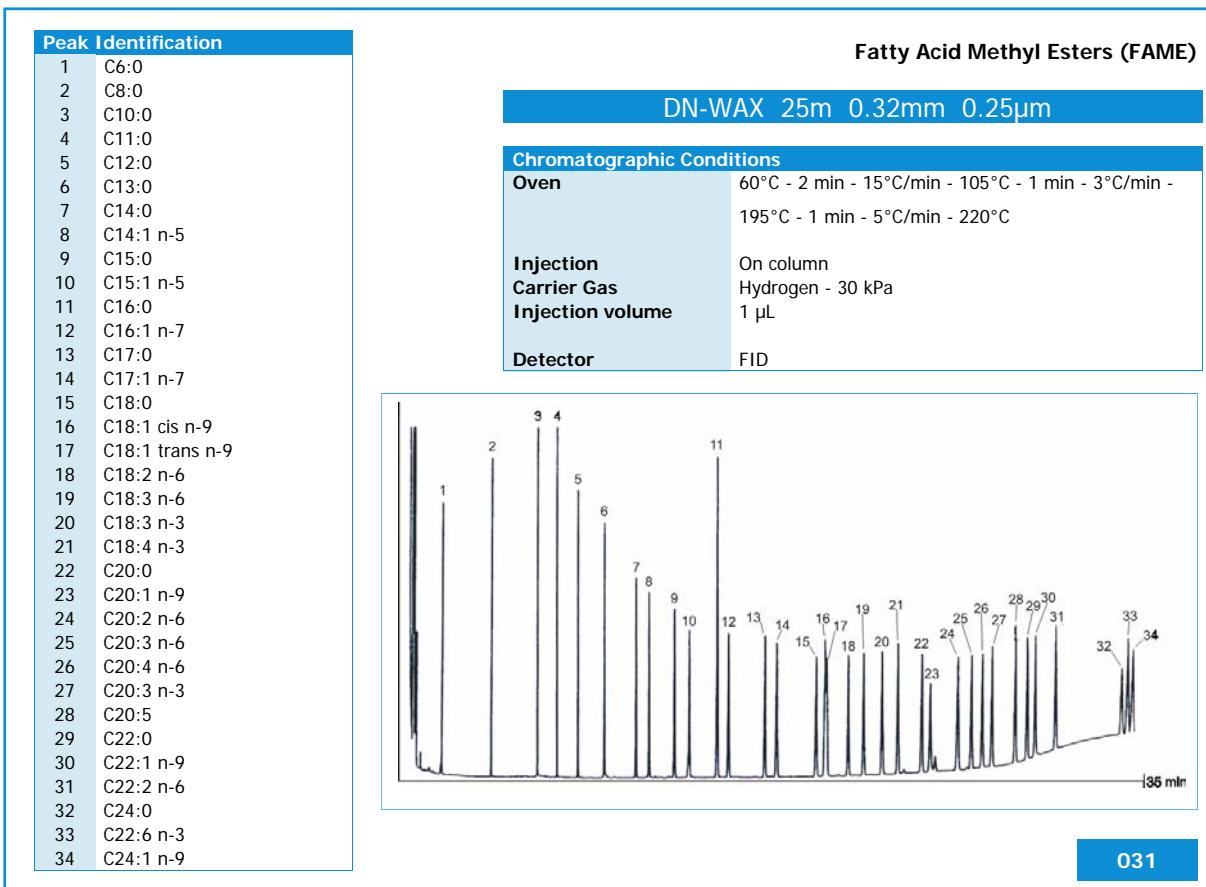
Detector FID - 230°C

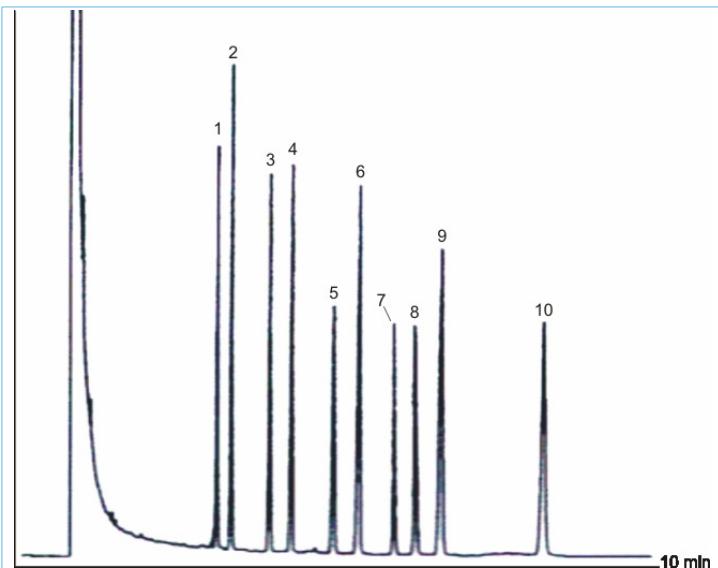
062



**DN-WAX**

## Chromatograms





## Triazine - EPA Method 619

DN-WAX 25m 0.32mm 0.25µm

## Chromatographic Conditions

Oven Isothermal - 230°C

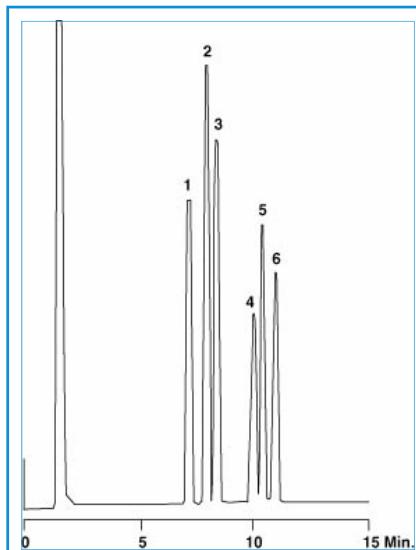
Injection Split - 280°C - 1:70  
Carrier Gas Hydrogen - 70 kPa  
Injection volume 1 µL

Detector FID - 250°C

## Peak Identification

1	Trietazine
2	Prometon
3	Propazine
4	Terbutylazine
5	Atrazine
6	Prometryn
7	Terburtryn
8	Simazine
9	Ametryn
10	Simetryn

033



## Dimethylaniline

DN-WAX 30m 0.32mm 0.25µm

## Chromatographic Conditions

Oven Isothermal - 130°C

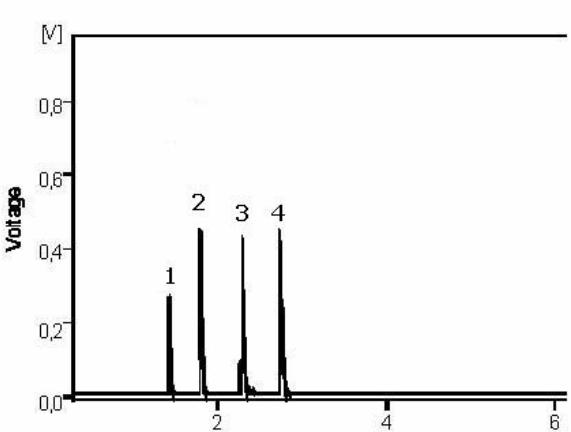
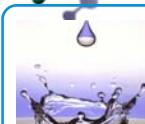
Injection Split  
Carrier Gas Nitrogen - 1.8 mL/min  
Injection volume 1 µL

Detector FID

## Peak Identification

1	2,6 - Dimethylaniline
2	2,4 - Dimethylaniline
3	2,5 - Dimethylaniline
4	3,5 - Dimethylaniline
5	2,3 - Dimethylaniline
6	3,4 - Dimethylaniline

034



## Residual Solvents in radiopharmaceuticals

DN-WAX 25m 0.25mm 0.25µm

## Chromatographic Conditions

Oven 50°C - 1 min - 20°C/min - 85°C - 5 min  
20°C/min - 200°CInjection Split - 250°C - 1:40  
Carrier Gas Helium 2 ml/min  
Injection volume 1 µL

Detector FID - 300°C

## Peak Identification

1	Diethylether
2	Ethanol
3	Acetone
4	Acetonitrile

035

# DN-WAX MS

## DN-WAX MS 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 813	
0.25mm	0.25µm	250°C	9414.116 814	
0.32mm	0.15µm	250°C	9414.116 815	
0.32mm	0.25µm	250°C	9414.116 816	

## DN-WAX MS 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 825	
0.25mm	0.25µm	250°C	9414.116 826	
0.32mm	0.15µm	250°C	9414.116 827	
0.32mm	0.25µm	250°C	9414.116 828	

## DN-WAX MS 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 817	
0.25mm	0.25µm	250°C	9414.116 818	
0.32mm	0.15µm	250°C	9414.116 819	
0.32mm	0.25µm	250°C	9414.116 820	

## DN-WAX MS 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 829	
0.25mm	0.25µm	250°C	9414.116 830	
0.32mm	0.15µm	250°C	9414.116 831	
0.32mm	0.25µm	250°C	9414.116 832	

## DN-WAX MS 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 821	
0.25mm	0.25µm	250°C	9414.116 822	
0.32mm	0.15µm	250°C	9414.116 823	
0.32mm	0.25µm	250°C	9414.116 824	

## DN-WAX MS

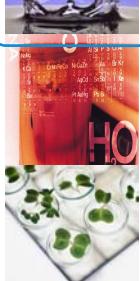
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-WAX MS Capillary Column  
 Polyethyleneglycol  
 Polar  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to      007-CW, Carbowax® 20M, CP-Wax 52CB,  
 DB™-WAX, Rtx™-WAX, HP-20M, HP™-Wax,  
 Innowax™, Omegawax, Stabilwax®,  
 SUPELCOWAX®-10, SUPEROX® II, BP-20,  
 ZB-WAX, AT™-WAX

Equivalent to    USP G14, G15, G16, G20, G39

## DN-WAX FAST

## DN-WAX FAST

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	250°C	9414.116 833	
0.05mm	0.10µm	250°C	9414.116 834	
0.10mm	0.10µm	250°C	9414.116 835	036/037
0.10mm	0.20µm	250°C	9414.116 836	

## DN-WAX FAST

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	250°C	9414.116 837	
0.05mm	0.10µm	250°C	9414.116 838	
0.10mm	0.10µm	250°C	9414.116 839	
0.10mm	0.20µm	250°C	9414.116 840	

## DN-WAX FAST

15m

ID	Film	Max Temp	Code	Chroma
0.10mm	0.10µm	250°C	9414.117 300	063/064/065

## DN-WAX FAST

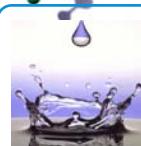
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-WAX FAST Capillary Column  
 Polyethyleneglycol  
 Polar  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to 007-CW, Carbowax® 20M, CP-Wax 52CB,  
 DB™-WAX, Rtx™-WAX, HP-20M, HP™-Wax,  
 Innowax™, Omegawax, Stabilwax®,  
 SUPELCOWAX®-10, SUPEROX®II, BP-20,  
 ZB-WAX, AT™-WAX

Equivalent to USP G14, G15, G16, G20, G39

# DN-WAX FAST

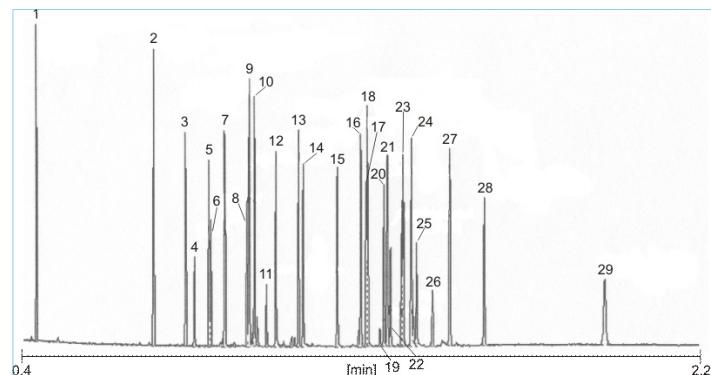
## Chromatograms

**Peak Identification**

1	/
2	$\alpha$ Me-Ionone
3	/
4	Limonene
5	Linalol
6	Me-Octynoate
7	Neral
8	Veratrol
9	Geranial
10	$\alpha$ iso Me-Ionone
11	Geraniol
12	Alc. Benzyl
13	OH-Citronellal
14	Cinnamal
15	Citronellal
16	Eugenol
17	Amyl Cinnamal
18	Anysol
19	Cinnamol
20	Farnesol 1
21	Isoeugenol
22	Hexyl Cinnamal
23	Amyl Cinnamol
24	1-Ph-10
25	Coumarine
26	Lyral 2
27	Bz. Benzoate
28	Bz. Salicylate
29	Bz. Cinnamate

**Allergens**DN-WAX FAST 5m 0.10mm 0.10 $\mu$ m**Chromatographic Conditions**

<b>Oven</b>	50°C - 0.1 min - 50°C/min - 230°C - 2 min
<b>Injection</b>	Split - 230°C - 1:200
<b>Carrier Gas</b>	Hydrogen - 0.5 ml/min
<b>Injection volume</b>	1 $\mu$ L
<b>Detector</b>	FID - 250°C

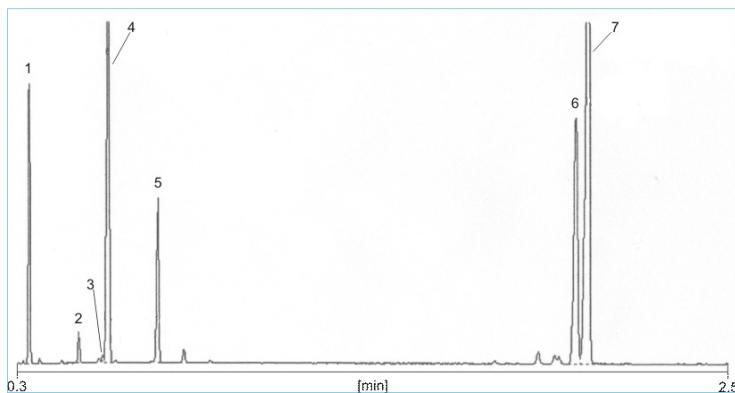


Courtesy of Prof. C. Bicchi, C. Brunelli  
 Università di Torino - Dipartimento Scienza e Tecnologia del Farmaco  
 Via P. Giuria, 9 - Torino - ITALY

036

**Bergamot**DN-WAX FAST 5m 0.10mm 0.10 $\mu$ m**Chromatographic Conditions**

<b>Oven</b>	50°C - 0.1 min - 30°C/min - 250°C - 5 min
<b>Injection</b>	Split - 230°C - 1:200
<b>Carrier Gas</b>	Hydrogen - 0.5 ml/min
<b>Injection volume</b>	1 $\mu$ L
<b>Detector</b>	FID - 250°C

**Peak Identification**

1	$\beta$ -Pinene
2	Myrcene
3	p-Cimene
4	Limonene
5	$\gamma$ -Terpinene
6	Linalool
7	Linalyl Acetate

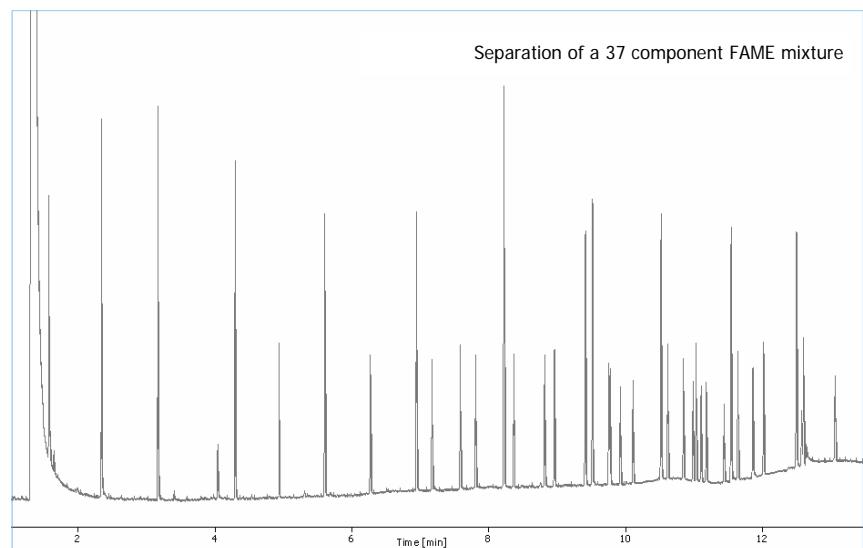
Courtesy of Prof. C. Bicchi, C. Brunelli  
 Università di Torino - Dipartimento Scienza e Tecnologia del Farmaco  
 Via P. Giuria, 9 - Torino - ITALY

037

## DN-WAX FAST

Chromatograms

## Fast GC application: fatty acid methyl esters (FAME)



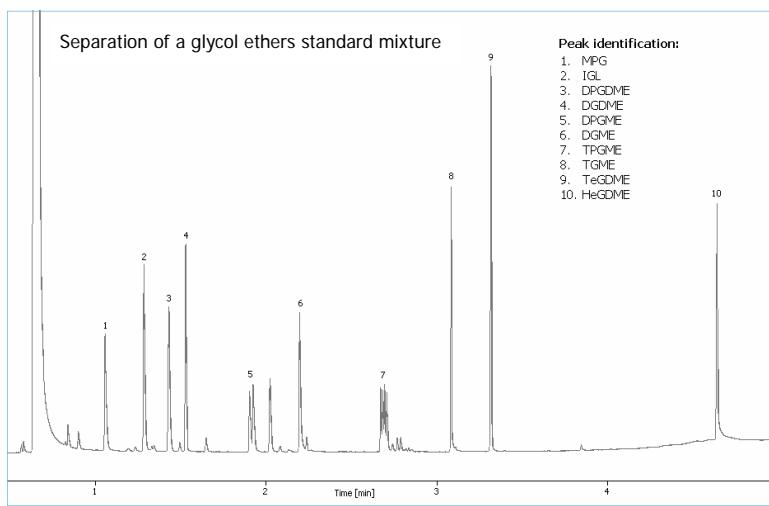
DN-WAX FAST 15m 0.10mm 0.10µm

## Chromatographic Conditions

Oven	40°C - 1.0 min - 50°C/min - 105°C 15°C/min - 260°C
Injection	PTV - 60°C - 999°C/min - 400°C - 5 min
Carrier Gas	Hydrogen - 0.5 ml/min
Injection volume	0.5 µL
Detector	FID - 400°C

063

## Fast GC application: Glycol Ethers

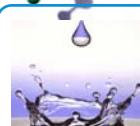


DN-WAX FAST 15m 0.10mm 0.10µm

## Chromatographic Conditions

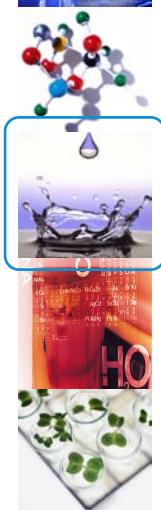
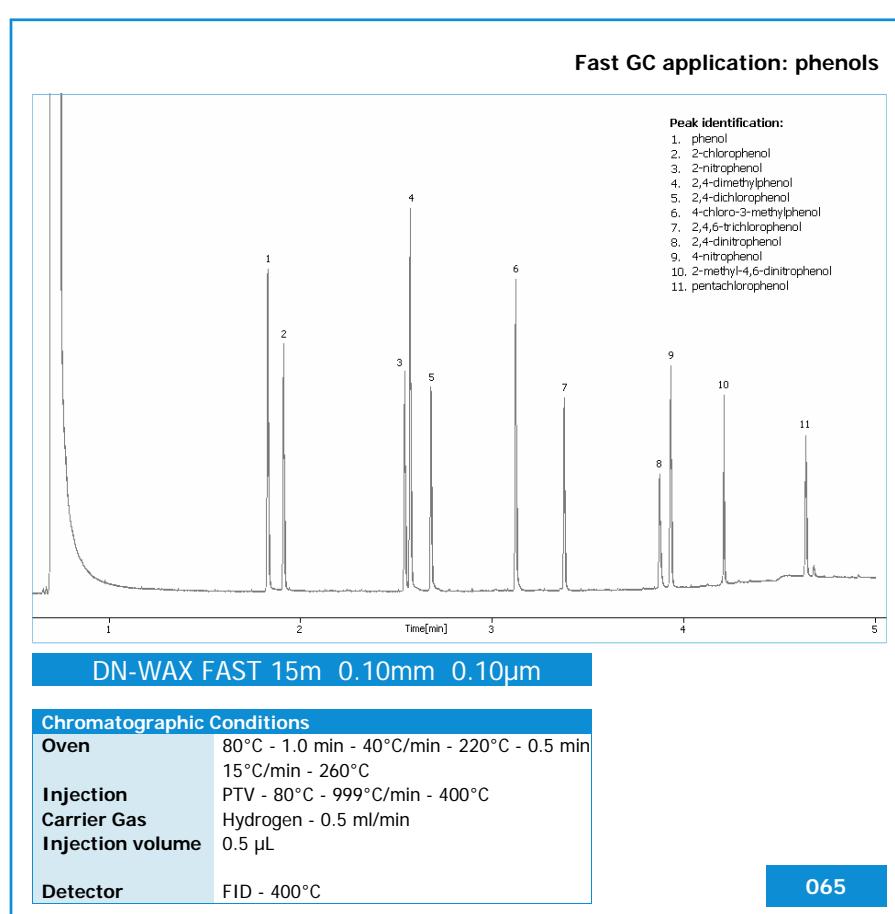
Oven	80°C - 0.5 min - 50°C/min - 280°C - 0.5 min
Injection	PTV - 60°C - 999°C/min - 400°C
Carrier Gas	Hydrogen - 0.5 ml/min
Injection volume	0.5 µL
Detector	FID - 400°C

064



# DN-WAX FAST

## Chromatograms



## DN-FFAP

15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 841	
0.25mm	0.25µm	250°C	9414.116 842	
0.25mm	0.45µm	250°C	9414.116 843	
0.25mm	1.00µm	250°C	9414.116 844	
0.32mm	0.15µm	250°C	9414.116 845	
0.32mm	0.25µm	250°C	9414.116 846	
0.32mm	0.45µm	250°C	9414.116 847	
0.32mm	1.00µm	250°C	9414.116 848	
0.53mm	0.15µm	250°C	9414.116 849	
0.53mm	0.25µm	250°C	9414.116 850	
0.53mm	0.45µm	250°C	9414.116 851	
0.53mm	1.00µm	250°C	9414.116 852	039/040/041

## DN-FFAP

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 877	
0.25mm	0.25µm	250°C	9414.116 878	
0.25mm	0.45µm	250°C	9414.116 879	
0.25mm	1.00µm	250°C	9414.116 880	
0.32mm	0.15µm	250°C	9414.116 881	
0.32mm	0.25µm	250°C	9414.116 882	
0.32mm	0.45µm	250°C	9414.116 883	
0.32mm	1.00µm	250°C	9414.116 884	
0.53mm	0.15µm	250°C	9414.116 885	
0.53mm	0.25µm	250°C	9414.116 886	
0.53mm	0.45µm	250°C	9414.116 887	
0.53mm	1.00µm	250°C	9414.116 888	

## DN-FFAP

25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 853	
0.25mm	0.25µm	250°C	9414.116 854	042
0.25mm	0.45µm	250°C	9414.116 855	
0.25mm	1.00µm	250°C	9414.116 856	
0.32mm	0.15µm	250°C	9414.116 857	
0.32mm	0.25µm	250°C	9414.116 858	038
0.32mm	0.45µm	250°C	9414.116 859	
0.32mm	1.00µm	250°C	9414.116 860	
0.53mm	0.15µm	250°C	9414.116 861	
0.53mm	0.25µm	250°C	9414.116 862	
0.53mm	0.45µm	250°C	9414.116 863	
0.53mm	1.00µm	250°C	9414.116 864	

## DN-FFAP

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 889	
0.25mm	0.25µm	250°C	9414.116 890	
0.25mm	0.45µm	250°C	9414.116 891	
0.25mm	1.00µm	250°C	9414.116 892	
0.32mm	0.15µm	250°C	9414.116 893	
0.32mm	0.25µm	250°C	9414.116 894	
0.32mm	0.45µm	250°C	9414.116 895	
0.32mm	1.00µm	250°C	9414.116 896	
0.53mm	0.15µm	250°C	9414.116 897	
0.53mm	0.25µm	250°C	9414.116 898	
0.53mm	0.45µm	250°C	9414.116 899	
0.53mm	1.00µm	250°C	9414.116 900	

## DN-FFAP

30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	250°C	9414.116 865	
0.25mm	0.25µm	250°C	9414.116 866	
0.25mm	0.45µm	250°C	9414.116 867	
0.25mm	1.00µm	250°C	9414.116 868	
0.32mm	0.15µm	250°C	9414.116 869	
0.32mm	0.25µm	250°C	9414.116 870	
0.32mm	0.45µm	250°C	9414.116 871	
0.32mm	1.00µm	250°C	9414.116 872	
0.53mm	0.15µm	250°C	9414.116 873	
0.53mm	0.25µm	250°C	9414.116 874	
0.53mm	0.45µm	250°C	9414.116 875	
0.53mm	1.00µm	250°C	9414.116 876	

## DN-FFAP

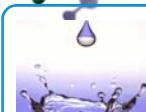
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-FFAP Capillary Column  
 Acid-Modified Polyethylene Glycol  
 High polarity  
 Bonded  
 Inertness  
 Low bleeding  
 Good thermal stability

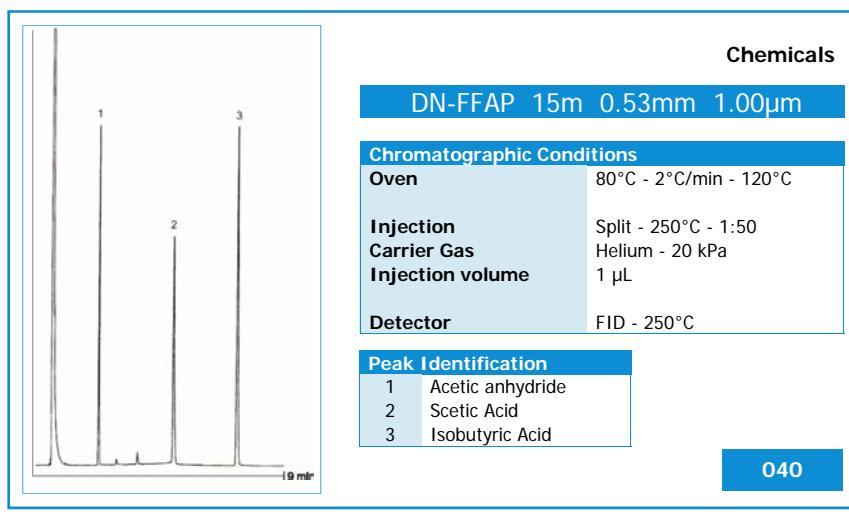
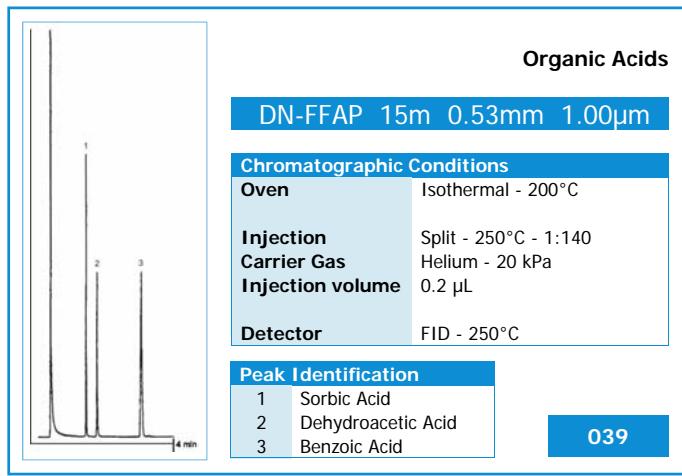
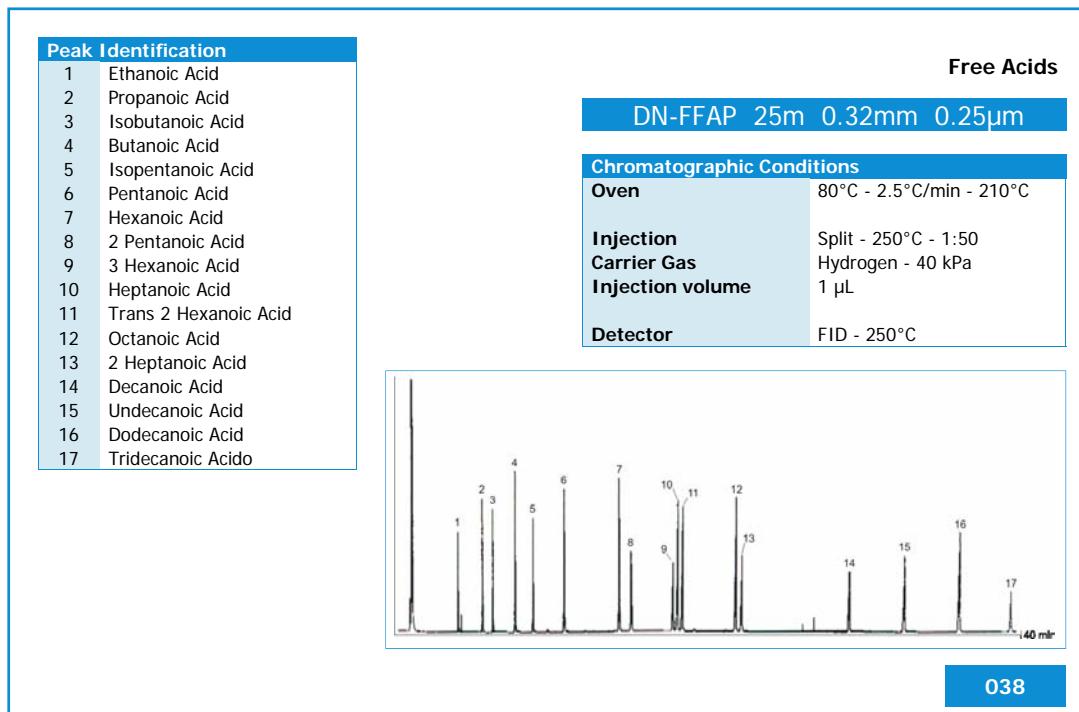
Similar to DB<sup>TM</sup>-FFAP, Stabilwax<sup>TM</sup>-DA, SP<sup>TM</sup>-1000, HP<sup>TM</sup>-FFAP, BP<sup>TM</sup>-21, CP-Wax<sup>TM</sup> 58 CB, 007<sup>TM</sup>-FFAP, OV<sup>TM</sup>-351, SUPEROX<sup>®</sup> FA, Nukol<sup>TM</sup>, AT<sup>TM</sup>-1000, EC<sup>TM</sup>-1000

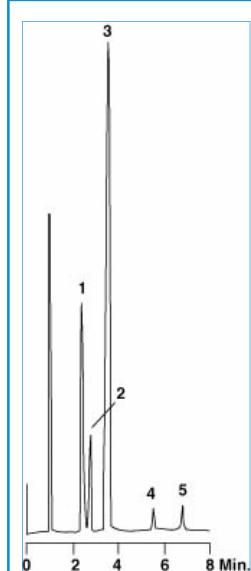
Equivalent to USP G25, G35

# DN-FFAP

## Chromatograms





Amides

DN-FFAP 15m 0.53mm 1.00µm

## Chromatographic Conditions

Oven 70°C - 10°C/min - 200°C

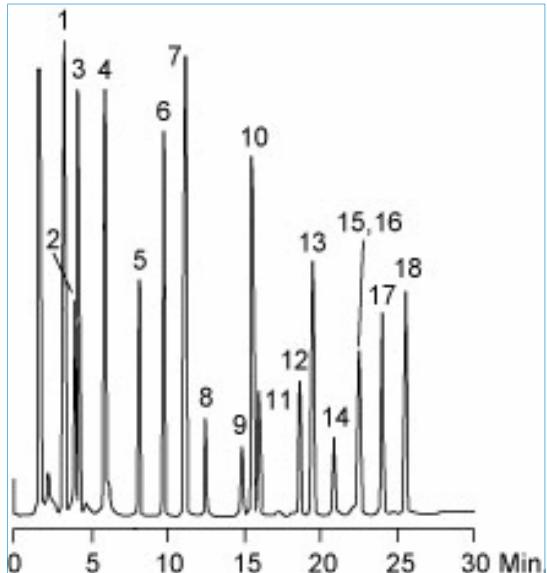
Injection Split  
Carrier Gas Helium - 4 mL/min  
Injection volume 1 µL

Detector FID

## Peak Identification

1	3-Picoline
2	N,N-Dimethylformamide
3	N,N-Dimethylacetamide
4	N-Methylacetamide
5	Acetamide

041



Flavours Test Mixture

DN-FFAP 25m 0.25mm 0.25µm

## Chromatographic Conditions

Oven 75°C - 2°C/min - 140°C

Injection Split  
Carrier Gas Helium - 1.7 mL/min  
Injection volume 1 µL

Detector FID

## Peak Identification

1	Isoamyl acetate
2	alfa - Phellandrene
3	Cumene
4	1 - Pentanol
5	6 - Methyl - 5 - hepten - 2 - one
6	2 - Nonanone
7	Ethyl octanoate
8	Furfural
9	Benzaldehyde
10	Linalool
11	Isobutyric acid
12	n - Butyric acid
13	Ethyl decanoate
14	Furfuryl alcohol
15	alfa - terpineol
16	beta - terpineol
17	Carvone
18	Methyl salicylate

042



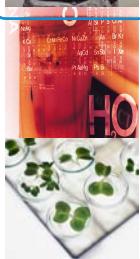
# DN-FFAP FAST

## DN-FFAP FAST 5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	260°C	9414.116 901	
0.05mm	0.10µm	260°C	9414.116 902	
0.10mm	0.10µm	260°C	9414.116 903	
0.10mm	0.20µm	260°C	9414.116 904	

## DN-FFAP FAST 10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	260°C	9414.116 905	
0.05mm	0.10µm	260°C	9414.116 906	
0.10mm	0.10µm	260°C	9414.116 907	
0.10mm	0.20µm	260°C	9414.116 908	



## DN-FFAP FAST

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-FFAP FAST Capillary Column  
 Acid-Modified Polyethylene Glycol  
 High polarity  
 Bonded  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to      DB<sup>TM</sup>-FFAP, Stabilwax<sup>TM</sup>-DA, SP<sup>TM</sup>-1000,  
 HP<sup>TM</sup>-FFAP, BP<sup>TM</sup>-21, CP-Wax<sup>TM</sup> 58 CB,  
 007<sup>TM</sup>-FFAP, OV<sup>TM</sup>-351, SUPEROX<sup>®</sup> FA, Nukol<sup>TM</sup>,  
 AT<sup>TM</sup>-1000

Equivalent to    USP G25, G35

## DN-10

15m

## DN-10

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 909	
0.32mm	0.25µm	260°C	9414.116 910	
0.53mm	0.25µm	260°C	9414.116 911	

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 918	
0.32mm	0.25µm	260°C	9414.116 919	043
0.53mm	0.25µm	260°C	9414.116 920	

## DN-10

25m

## DN-10

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 912	
0.32mm	0.25µm	260°C	9414.116 913	
0.53mm	0.25µm	260°C	9414.116 914	

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 921	
0.32mm	0.25µm	260°C	9414.116 922	
0.53mm	0.25µm	260°C	9414.116 923	

## DN-10

30m

## DN-10

Technical Specifications

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	260°C	9414.116 915	
0.32mm	0.25µm	260°C	9414.116 916	
0.53mm	0.25µm	260°C	9414.116 917	

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

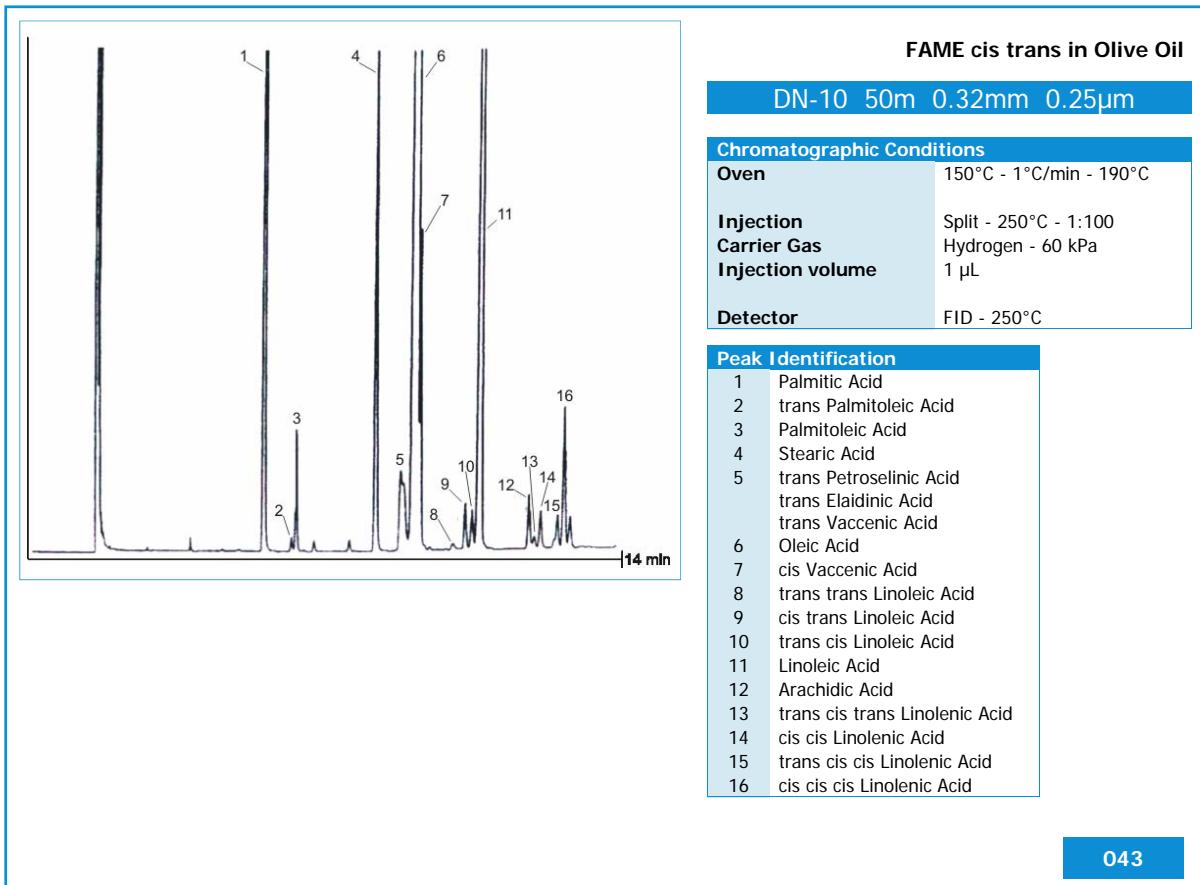
DANI DN-10 Capillary Column  
Poly(biscyanopropyl siloxane)  
High polarity  
Bonded  
Inertness  
Low bleeding  
Good thermal stability

Similar to CP-Sil™ 88, OV™-275, Rtx™-2330, SP™-2340



# DN-10

## Chromatograms



## DN-10 FAST

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	260°C	9414.116 924	
0.05mm	0.10µm	260°C	9414.116 925	
0.10mm	0.10µm	260°C	9414.116 926	
0.10mm	0.20µm	260°C	9414.116 927	

## DN-10 FAST

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	260°C	9414.116 928	
0.05mm	0.10µm	260°C	9414.116 929	
0.10mm	0.10µm	260°C	9414.116 930	
0.10mm	0.20µm	260°C	9414.116 931	

## DN-10 FAST

Technical Specifications




Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-10 FAST Capillary Column  
 Poly(biscyanopropyl siloxane)  
 High polarity  
 Bonded  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to CP-Sil<sup>TM</sup> 88, OV<sup>TM</sup>-275, Rtx<sup>TM</sup>-2330, SP<sup>TM</sup>-2340

# DN-13

## DN-13

## 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 932	
0.25mm	0.25µm	320°C	9414.116 933	
0.25mm	0.45µm	310°C	9414.116 934	
0.25mm	1.00µm	300°C	9414.116 935	
0.32mm	0.15µm	320°C	9414.116 936	
0.32mm	0.25µm	320°C	9414.116 937	
0.32mm	0.45µm	310°C	9414.116 938	
0.32mm	1.00µm	300°C	9414.116 939	
0.53mm	0.15µm	320°C	9414.116 940	
0.53mm	0.25µm	320°C	9414.116 941	
0.53mm	0.45µm	310°C	9414.116 942	
0.53mm	1.00µm	300°C	9414.116 943	

## DN-13

## 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 968	
0.25mm	0.25µm	320°C	9414.116 969	
0.25mm	0.45µm	310°C	9414.116 970	
0.25mm	1.00µm	300°C	9414.116 971	
0.32mm	0.15µm	320°C	9414.116 972	
0.32mm	0.25µm	320°C	9414.116 973	
0.32mm	0.45µm	310°C	9414.116 974	
0.32mm	1.00µm	300°C	9414.116 975	
0.53mm	0.15µm	320°C	9414.116 976	
0.53mm	0.25µm	320°C	9414.116 977	
0.53mm	0.45µm	310°C	9414.116 978	
0.53mm	1.00µm	300°C	9414.116 979	

## DN-13

## 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 944	
0.25mm	0.25µm	320°C	9414.116 945	
0.25mm	0.45µm	310°C	9414.116 946	
0.25mm	1.00µm	300°C	9414.116 947	
0.32mm	0.15µm	320°C	9414.116 948	
0.32mm	0.25µm	320°C	9414.116 949	
0.32mm	0.45µm	310°C	9414.116 950	
0.32mm	1.00µm	300°C	9414.116 951	
0.53mm	0.15µm	320°C	9414.116 952	
0.53mm	0.25µm	320°C	9414.116 953	
0.53mm	0.45µm	310°C	9414.116 954	
0.53mm	1.00µm	300°C	9414.116 955	

## DN-13

## 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 980	
0.25mm	0.25µm	320°C	9414.116 981	
0.25mm	0.45µm	310°C	9414.116 982	
0.25mm	1.00µm	300°C	9414.116 983	
0.32mm	0.15µm	320°C	9414.116 984	
0.32mm	0.25µm	320°C	9414.116 985	
0.32mm	0.45µm	310°C	9414.116 986	
0.32mm	1.00µm	300°C	9414.116 987	
0.53mm	0.15µm	320°C	9414.116 988	
0.53mm	0.25µm	320°C	9414.116 989	
0.53mm	0.45µm	310°C	9414.116 990	
0.53mm	1.00µm	300°C	9414.116 991	

## DN-13

## 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	320°C	9414.116 956	
0.25mm	0.25µm	320°C	9414.116 957	
0.25mm	0.45µm	310°C	9414.116 958	
0.25mm	1.00µm	300°C	9414.116 959	
0.32mm	0.15µm	320°C	9414.116 960	
0.32mm	0.25µm	320°C	9414.116 961	
0.32mm	0.45µm	310°C	9414.116 962	
0.32mm	1.00µm	300°C	9414.116 963	
0.53mm	0.15µm	320°C	9414.116 964	
0.53mm	0.25µm	320°C	9414.116 965	
0.53mm	0.45µm	310°C	9414.116 966	
0.53mm	1.00µm	300°C	9414.116 967	

## DN-13

## Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-13 Capillary Column  
 (13% Phenyl) - 87% methylpolysiloxane  
 Intermediate polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to CP-Sil™ 13 CB



## DN-13 HT 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 222	
0.32mm	0.10µm	380°C	9414.117 223	
0.53mm	0.10µm	380°C	9414.117 224	

## DN-13 HT 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 231	
0.32mm	0.10µm	380°C	9414.117 232	
0.53mm	0.10µm	380°C	9414.117 233	

## DN-13 HT 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 225	
0.32mm	0.10µm	380°C	9414.117 226	
0.53mm	0.10µm	380°C	9414.117 227	

## DN-13 HT 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 234	
0.32mm	0.10µm	380°C	9414.117 235	
0.53mm	0.10µm	380°C	9414.117 236	

## DN-13 HT 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.10µm	380°C	9414.117 228	
0.32mm	0.10µm	380°C	9414.117 229	
0.53mm	0.10µm	380°C	9414.117 230	

## DN-13 HT Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-13 HT Capillary Column  
 (13% Phenyl) - 87% methylpolysiloxane  
 Intermediate polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

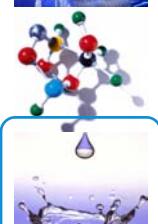
Similar to CP-Sil™ 13 CB



# DN-13 FAST

DN-13 FAST		5m		
ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 992	
0.05mm	0.10µm	350°C	9414.116 993	
0.10mm	0.10µm	350°C	9414.116 994	
0.10mm	0.20µm	350°C	9414.116 995	

DN-13 FAST		10m		
ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.116 996	
0.05mm	0.10µm	350°C	9414.116 997	
0.10mm	0.10µm	350°C	9414.116 998	
0.10mm	0.20µm	350°C	9414.116 999	



## DN-13 FAST

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-13 FAST Capillary Column  
 (13% Phenyl) - 87% methylpolysiloxane  
 Intermediate polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to CP-Sil™ 13 CB

## DN-13 FAST HT

## DN-13 FAST HT

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 279	
0.05mm	0.10µm	380°C	9414.117 280	
0.10mm	0.10µm	380°C	9414.117 281	

## DN-13 FAST HT

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	380°C	9414.117 282	
0.05mm	0.10µm	380°C	9414.117 283	
0.10mm	0.10µm	380°C	9414.117 284	

## DN-13 FAST HT Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-13 FAST HT Capillary Column  
 (13% Phenyl) - 87% methylpolysiloxane  
 Intermediate polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to CP-Sil™ 13 CB



# DN-PLUS

## DN-PLUS 15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.117 000	
0.25mm	0.25µm	280°C	9414.117 001	
0.25mm	0.45µm	280°C	9414.117 002	
0.25mm	1.00µm	280°C	9414.117 003	
0.32mm	0.15µm	280°C	9414.117 004	
0.32mm	0.25µm	280°C	9414.117 005	
0.32mm	0.45µm	280°C	9414.117 006	
0.32mm	1.00µm	280°C	9414.117 007	
0.53mm	0.15µm	280°C	9414.117 008	
0.53mm	0.25µm	280°C	9414.117 009	
0.53mm	0.45µm	280°C	9414.117 010	
0.53mm	1.00µm	280°C	9414.117 011	

## DN-PLUS 50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.117 036	
0.25mm	0.25µm	280°C	9414.117 037	
0.25mm	0.45µm	280°C	9414.117 038	
0.25mm	1.00µm	280°C	9414.117 039	
0.32mm	0.15µm	280°C	9414.117 040	
0.32mm	0.25µm	280°C	9414.117 041	
0.32mm	0.45µm	280°C	9414.117 042	
0.32mm	1.00µm	280°C	9414.117 043	
0.53mm	0.15µm	280°C	9414.117 044	
0.53mm	0.25µm	280°C	9414.117 045	
0.53mm	0.45µm	280°C	9414.117 046	
0.53mm	1.00µm	280°C	9414.117 047	

## DN-PLUS 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.117 012	
0.25mm	0.25µm	280°C	9414.117 013	
0.25mm	0.45µm	280°C	9414.117 014	
0.25mm	1.00µm	280°C	9414.117 015	
0.32mm	0.15µm	280°C	9414.117 016	
0.32mm	0.25µm	280°C	9414.117 017	
0.32mm	0.45µm	280°C	9414.117 018	
0.32mm	1.00µm	280°C	9414.117 019	
0.53mm	0.15µm	280°C	9414.117 020	
0.53mm	0.25µm	280°C	9414.117 021	
0.53mm	0.45µm	280°C	9414.117 022	
0.53mm	1.00µm	280°C	9414.117 023	

## DN-PLUS 60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.117 048	
0.25mm	0.25µm	280°C	9414.117 049	
0.25mm	0.45µm	280°C	9414.117 050	
0.25mm	1.00µm	280°C	9414.117 051	
0.32mm	0.15µm	280°C	9414.117 052	
0.32mm	0.25µm	280°C	9414.117 053	
0.32mm	0.45µm	280°C	9414.117 054	
0.32mm	1.00µm	280°C	9414.117 055	
0.53mm	0.15µm	280°C	9414.117 056	
0.53mm	0.25µm	280°C	9414.117 057	
0.53mm	0.45µm	280°C	9414.117 058	
0.53mm	1.00µm	280°C	9414.117 059	

## DN-PLUS 30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	280°C	9414.117 024	
0.25mm	0.25µm	280°C	9414.117 025	
0.25mm	0.45µm	280°C	9414.117 026	
0.25mm	1.00µm	280°C	9414.117 027	
0.32mm	0.15µm	280°C	9414.117 028	
0.32mm	0.25µm	280°C	9414.117 029	
0.32mm	0.45µm	280°C	9414.117 030	
0.32mm	1.00µm	280°C	9414.117 031	
0.53mm	0.15µm	280°C	9414.117 032	
0.53mm	0.25µm	280°C	9414.117 033	
0.53mm	0.45µm	280°C	9414.117 034	
0.53mm	1.00µm	280°C	9414.117 035	

## DN-PLUS

### Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-PLUS Capillary Column

High polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to NO EQUIVALENT



## DN-PLUS FAST

## DN-PLUS FAST

5m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	280°C	9414.117 060	
0.05mm	0.10µm	280°C	9414.117 061	
0.10mm	0.10µm	280°C	9414.117 062	
0.10mm	0.20µm	280°C	9414.117 063	

## DN-PLUS FAST

10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	280°C	9414.117 064	
0.05mm	0.10µm	280°C	9414.117 065	
0.10mm	0.10µm	280°C	9414.117 066	
0.10mm	0.20µm	280°C	9414.117 067	

## DN-PLUS FAST

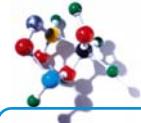
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-PLUS FAST Capillary Column

High polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to NO EQUIVALENT



# DN-264

## DN-264

15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.117 068	
0.25mm	0.25µm	350°C	9414.117 069	
0.25mm	0.45µm	330°C	9414.117 070	
0.25mm	1.00µm	330°C	9414.117 071	
0.25mm	1.50µm	330°C	9414.117 072	
0.32mm	0.15µm	350°C	9414.117 073	
0.32mm	0.25µm	350°C	9414.117 074	
0.32mm	0.45µm	330°C	9414.117 075	
0.32mm	1.00µm	330°C	9414.117 076	
0.32mm	1.50µm	330°C	9414.117 077	
0.32mm	3.00µm	320°C	9414.117 078	
0.32mm	5.00µm	320°C	9414.117 079	
0.53mm	0.15µm	350°C	9414.117 080	
0.53mm	0.25µm	350°C	9414.117 081	
0.53mm	0.45µm	330°C	9414.117 082	
0.53mm	1.00µm	330°C	9414.117 083	
0.53mm	1.50µm	330°C	9414.117 084	
0.53mm	3.00µm	320°C	9414.117 085	
0.53mm	5.00µm	320°C	9414.117 086	

## DN-264

50m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.117 125	
0.25mm	0.25µm	350°C	9414.117 126	
0.25mm	0.45µm	330°C	9414.117 127	
0.25mm	1.00µm	330°C	9414.117 128	
0.25mm	1.50µm	330°C	9414.117 129	
0.32mm	0.15µm	350°C	9414.117 130	
0.32mm	0.25µm	350°C	9414.117 131	
0.32mm	0.45µm	330°C	9414.117 132	
0.32mm	1.00µm	330°C	9414.117 133	
0.32mm	1.50µm	330°C	9414.117 134	
0.32mm	3.00µm	320°C	9414.117 135	
0.32mm	5.00µm	320°C	9414.117 136	
0.53mm	0.15µm	350°C	9414.117 137	
0.53mm	0.25µm	350°C	9414.117 138	
0.53mm	0.45µm	330°C	9414.117 139	
0.53mm	1.00µm	330°C	9414.117 140	
0.53mm	1.50µm	330°C	9414.117 141	
0.53mm	3.00µm	320°C	9414.117 142	
0.53mm	5.00µm	320°C	9414.117 143	

## DN-264

25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.117 087	
0.25mm	0.25µm	350°C	9414.117 088	
0.25mm	0.45µm	330°C	9414.117 089	
0.25mm	1.00µm	330°C	9414.117 090	
0.25mm	1.50µm	330°C	9414.117 091	
0.32mm	0.15µm	350°C	9414.117 092	
0.32mm	0.25µm	350°C	9414.117 093	
0.32mm	0.45µm	330°C	9414.117 094	
0.32mm	1.00µm	330°C	9414.117 095	
0.32mm	1.50µm	330°C	9414.117 096	
0.32mm	3.00µm	320°C	9414.117 097	
0.32mm	5.00µm	320°C	9414.117 098	
0.53mm	0.15µm	350°C	9414.117 099	
0.53mm	0.25µm	350°C	9414.117 100	
0.53mm	0.45µm	330°C	9414.117 101	
0.53mm	1.00µm	330°C	9414.117 102	
0.53mm	1.50µm	330°C	9414.117 103	
0.53mm	3.00µm	320°C	9414.117 104	
0.53mm	5.00µm	320°C	9414.117 105	

## DN-264

60m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.117 144	
0.25mm	0.25µm	350°C	9414.117 145	
0.25mm	0.45µm	330°C	9414.117 146	
0.25mm	1.00µm	330°C	9414.117 147	
0.25mm	1.50µm	330°C	9414.117 148	
0.32mm	0.15µm	350°C	9414.117 149	
0.32mm	0.25µm	350°C	9414.117 150	
0.32mm	0.45µm	330°C	9414.117 151	
0.32mm	1.00µm	330°C	9414.117 152	
0.32mm	1.50µm	330°C	9414.117 153	
0.32mm	3.00µm	320°C	9414.117 154	
0.32mm	5.00µm	320°C	9414.117 155	
0.53mm	0.15µm	350°C	9414.117 156	
0.53mm	0.25µm	350°C	9414.117 157	
0.53mm	0.45µm	330°C	9414.117 158	
0.53mm	1.00µm	330°C	9414.117 159	
0.53mm	1.50µm	330°C	9414.117 160	
0.53mm	3.00µm	320°C	9414.117 161	
0.53mm	5.00µm	320°C	9414.117 162	

## DN-264

30m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.15µm	350°C	9414.117 106	
0.25mm	0.25µm	350°C	9414.117 107	
0.25mm	0.45µm	330°C	9414.117 108	
0.25mm	1.00µm	330°C	9414.117 109	
0.25mm	1.50µm	330°C	9414.117 110	
0.32mm	0.15µm	350°C	9414.117 111	
0.32mm	0.25µm	350°C	9414.117 112	
0.32mm	0.45µm	330°C	9414.117 113	
0.32mm	1.00µm	330°C	9414.117 114	
0.32mm	1.50µm	330°C	9414.117 115	
0.32mm	3.00µm	320°C	9414.117 116	
0.32mm	5.00µm	320°C	9414.117 117	044/045
0.53mm	0.15µm	350°C	9414.117 118	
0.53mm	0.25µm	350°C	9414.117 119	
0.53mm	0.45µm	330°C	9414.117 120	
0.53mm	1.00µm	330°C	9414.117 121	
0.53mm	1.50µm	330°C	9414.117 122	
0.53mm	3.00µm	320°C	9414.117 123	
0.53mm	5.00µm	320°C	9414.117 124	

## DN-264

Technical Specifications

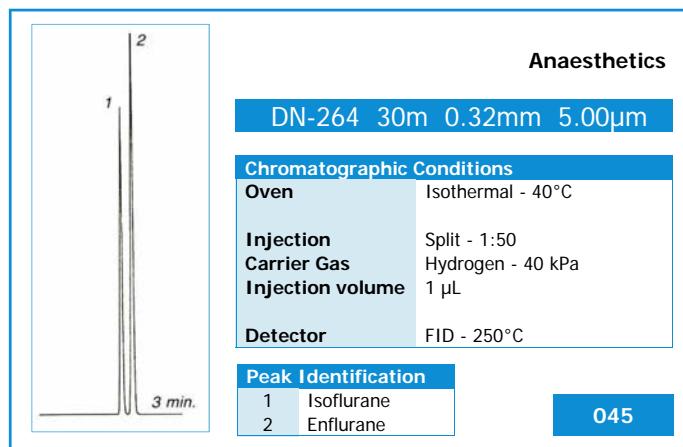
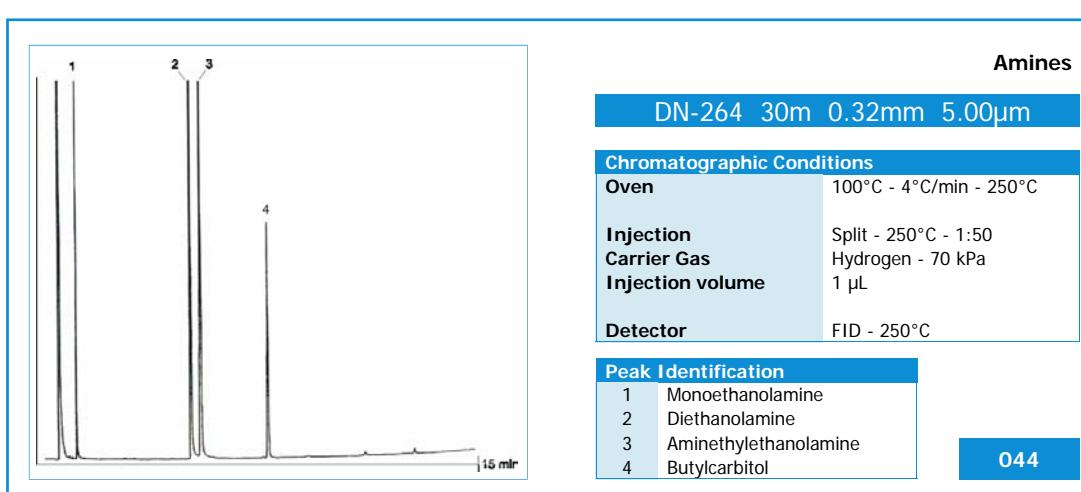
Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-264 Capillary Column

Low polarity  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to NO EQUIVALENT





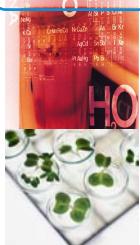
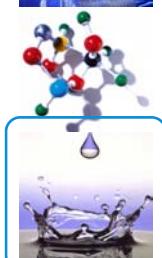
# DN-264 FAST

**DN-264 FAST**

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.117	163
0.05mm	0.10µm	350°C	9414.117	164
0.10mm	0.10µm	350°C	9414.117	165
0.10mm	0.20µm	350°C	9414.117	166

DN-264 FAST 10m

ID	Film	Max Temp	Code	Chroma
0.05mm	0.05µm	350°C	9414.117 167	
0.05mm	0.10µm	350°C	9414.117 168	
0.10mm	0.10µm	350°C	9414.117 169	
0.10mm	0.20µm	350°C	9414.117 170	



**DN-264 EAST** Technical Specifications

**Every Column Individually Tested**  
**Test Certified and Grob Mixture included in each Column**  
**Instruction Manual included in each Column**

DANI DN-264 FAST Capillary Column

- Low polarity
- Bonded and cross-linked
- Inertness
- Low bleeding
- Good thermal stability

Similar to NO EQUIVALENT

Retention Gap are often added to the front of the analytical column to act as a guard. DN-SAFE columns is a combination of a DANI GC capillary columns with a built-in DANI Retention Gaps.

These innovative columns incorporate both Retention Gap column and analytical column in a continuous length of tubing, eliminating the connection: peak shape problems and leaks associated with unions are history as well as samples containing difficult analytes such as pesticides or drugs.

DANI DN-SAFE columns offer:

- Minimize front-end contamination of the column and increase column lifetime.
- Aid in focusing sample onto the front end of the column for excellent peak shape.
- Minimize the amount of mass selective detector (MSD) source contamination originating from the column.
- Faster stabilization in MS and other detection systems due to an additional uncoated, deactivated section at the end.

### DN-SAFE 1

Length	ID	Film	Retention Gap	Code
15 meters	0.25mm	0.25µm	+ 5 meters	9414.117 311
15 meters	0.32mm	0.25µm	+ 5 meters	9414.117 312
30 meters	0.25mm	0.25µm	+ 5 meters	9414.117 313
30 meters	0.32mm	0.25µm	+ 5 meters	9414.117 314
50 meters	0.25mm	0.25µm	+ 5 meters	9414.117 315
50 meters	0.32mm	0.25µm	+ 5 meters	9414.117 316
15 meters	0.25mm	0.25µm	+ 10 meters	9414.117 317
15 meters	0.32mm	0.25µm	+ 10 meters	9414.117 318
30 meters	0.25mm	0.25µm	+ 10 meters	9414.117 319
30 meters	0.32mm	0.25µm	+ 10 meters	9414.117 320
50 meters	0.25mm	0.25µm	+ 10 meters	9414.117 321
50 meters	0.32mm	0.25µm	+ 10 meters	9414.117 322

### DN-SAFE 5

Length	ID	Film	Retention Gap	Code
15 meters	0.25mm	0.25µm	+ 5 meters	9414.117 335
15 meters	0.32mm	0.25µm	+ 5 meters	9414.117 336
30 meters	0.25mm	0.25µm	+ 5 meters	9414.117 337
30 meters	0.32mm	0.25µm	+ 5 meters	9414.117 338
50 meters	0.25mm	0.25µm	+ 5 meters	9414.117 339
50 meters	0.32mm	0.25µm	+ 5 meters	9414.117 340
15 meters	0.25mm	0.25µm	+ 10 meters	9414.117 341
15 meters	0.32mm	0.25µm	+ 10 meters	9414.117 342
30 meters	0.25mm	0.25µm	+ 10 meters	9414.117 343
30 meters	0.32mm	0.25µm	+ 10 meters	9414.117 344
50 meters	0.25mm	0.25µm	+ 10 meters	9414.117 345
50 meters	0.32mm	0.25µm	+ 10 meters	9414.117 346

### DN-SAFE 1 MS

Length	ID	Film	Retention Gap	Code
15 meters	0.25mm	0.25µm	+ 5 meters	9414.117 323
15 meters	0.32mm	0.25µm	+ 5 meters	9414.117 324
30 meters	0.25mm	0.25µm	+ 5 meters	9414.117 325
30 meters	0.32mm	0.25µm	+ 5 meters	9414.117 326
50 meters	0.25mm	0.25µm	+ 5 meters	9414.117 327
50 meters	0.32mm	0.25µm	+ 5 meters	9414.117 328
15 meters	0.25mm	0.25µm	+ 10 meters	9414.117 329
15 meters	0.32mm	0.25µm	+ 10 meters	9414.117 330
30 meters	0.25mm	0.25µm	+ 10 meters	9414.117 331
30 meters	0.32mm	0.25µm	+ 10 meters	9414.117 332
50 meters	0.25mm	0.25µm	+ 10 meters	9414.117 333
50 meters	0.32mm	0.25µm	+ 10 meters	9414.117 334

### DN-SAFE 5 MS

Length	ID	Film	Retention Gap	Code
15 meters	0.25mm	0.25µm	+ 5 meters	9414.117 347
15 meters	0.32mm	0.25µm	+ 5 meters	9414.117 348
30 meters	0.25mm	0.25µm	+ 5 meters	9414.117 349
30 meters	0.32mm	0.25µm	+ 5 meters	9414.117 350
50 meters	0.25mm	0.25µm	+ 5 meters	9414.117 351
50 meters	0.32mm	0.25µm	+ 5 meters	9414.117 352
15 meters	0.25mm	0.25µm	+ 10 meters	9414.117 353
15 meters	0.32mm	0.25µm	+ 10 meters	9414.117 354
30 meters	0.25mm	0.25µm	+ 10 meters	9414.117 355
30 meters	0.32mm	0.25µm	+ 10 meters	9414.117 356
50 meters	0.25mm	0.25µm	+ 10 meters	9414.117 357
50 meters	0.32mm	0.25µm	+ 10 meters	9414.117 358



# DN-SAFE

## DN-SAFE WAX

Length	ID	Film	Retention Gap	Code
15 meters	0.25mm	0.25µm	+ 5 meters	9414.117 359
15 meters	0.32mm	0.25µm	+ 5 meters	9414.117 360
30 meters	0.25mm	0.25µm	+ 5 meters	9414.117 361
30 meters	0.32mm	0.25µm	+ 5 meters	9414.117 362
50 meters	0.25mm	0.25µm	+ 5 meters	9414.117 363
50 meters	0.32mm	0.25µm	+ 5 meters	9414.117 364
15 meters	0.25mm	0.25µm	+ 10 meters	9414.117 365
15 meters	0.32mm	0.25µm	+ 10 meters	9414.117 366
30 meters	0.25mm	0.25µm	+ 10 meters	9414.117 367
30 meters	0.32mm	0.25µm	+ 10 meters	9414.117 368
50 meters	0.25mm	0.25µm	+ 10 meters	9414.117 369
50 meters	0.32mm	0.25µm	+ 10 meters	9414.117 370

## DN-SAFE FFAP

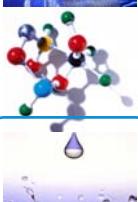
Length	ID	Film	Retention Gap	Code
15 meters	0.25mm	0.25µm	+ 5 meters	9414.117 383
15 meters	0.32mm	0.25µm	+ 5 meters	9414.117 384
30 meters	0.25mm	0.25µm	+ 5 meters	9414.117 385
30 meters	0.32mm	0.25µm	+ 5 meters	9414.117 386
50 meters	0.25mm	0.25µm	+ 5 meters	9414.117 387
50 meters	0.32mm	0.25µm	+ 5 meters	9414.117 388
15 meters	0.25mm	0.25µm	+ 10 meters	9414.117 389
15 meters	0.32mm	0.25µm	+ 10 meters	9414.117 390
30 meters	0.25mm	0.25µm	+ 10 meters	9414.117 391
30 meters	0.32mm	0.25µm	+ 10 meters	9414.117 392
50 meters	0.25mm	0.25µm	+ 10 meters	9414.117 393
50 meters	0.32mm	0.25µm	+ 10 meters	9414.117 394

## DN-SAFE WAX MS

Length	ID	Film	Retention Gap	Code
15 meters	0.25mm	0.25µm	+ 5 meters	9414.117 371
15 meters	0.32mm	0.25µm	+ 5 meters	9414.117 372
30 meters	0.25mm	0.25µm	+ 5 meters	9414.117 373
30 meters	0.32mm	0.25µm	+ 5 meters	9414.117 374
50 meters	0.25mm	0.25µm	+ 5 meters	9414.117 375
50 meters	0.32mm	0.25µm	+ 5 meters	9414.117 376
15 meters	0.25mm	0.25µm	+ 10 meters	9414.117 377
15 meters	0.32mm	0.25µm	+ 10 meters	9414.117 378
30 meters	0.25mm	0.25µm	+ 10 meters	9414.117 379
30 meters	0.32mm	0.25µm	+ 10 meters	9414.117 380
50 meters	0.25mm	0.25µm	+ 10 meters	9414.117 381
50 meters	0.32mm	0.25µm	+ 10 meters	9414.117 382

## DN-SAFE Columns ON DEMAND

DN-1 HT	DN-200	DN-264
DN-1 FAST	DN-200 FAST	DN-264 FAST
DN-1 FAST HT		
DN-225		DN-WAX FAST
DN-5 HT	DN-225 FAST	
DN-5 FAST		DN-FFAP FAST
DN-5 FAST HT	DN-50	
	DN-50 FAST	DN-624
DN-20		
DN-20 HT	DN-10	
DN-20 FAST HT	DN-10 FAST	
DN-17	DN-13	
DN-17 HT	DN-13 HT	
DN-17 FAST	DN-13 FAST	
DN-17 HT	DN-13 FAST HT	
DN-1701	DN-PLUS	
DN-1701 FAST	DN-PLUS FAST	



## DN-SAFE

Technical Specifications

### Every Column Individually Tested

Test Certified and Grob Mixture included in each Column

Instruction Manual included in each Column

DANI DN-SAFE Capillary Column

Please refer to Stationary Phase Technical Specifications

## DN-BioDiesel

Dedicated Columns

## DN-BioDiesel

15m

ID	Film	Max Temp	Code	Chroma	Methods
0.32mm	0.10µm	380°C	9414.117 297	059	UNI EN ISO 14105 ASTM 6584

## DN-BioDiesel

30m

ID	Film	Max Temp	Code	Chroma	Methods
0.32mm	0.25µm	250°C	9414.117 298	060	UNI EN ISO 14103
0.32mm	1.00µm	250°C	9414.117 299	061	UNI EN ISO 14110

## DN-BioDiesel

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-BioDiesel Capillary Column

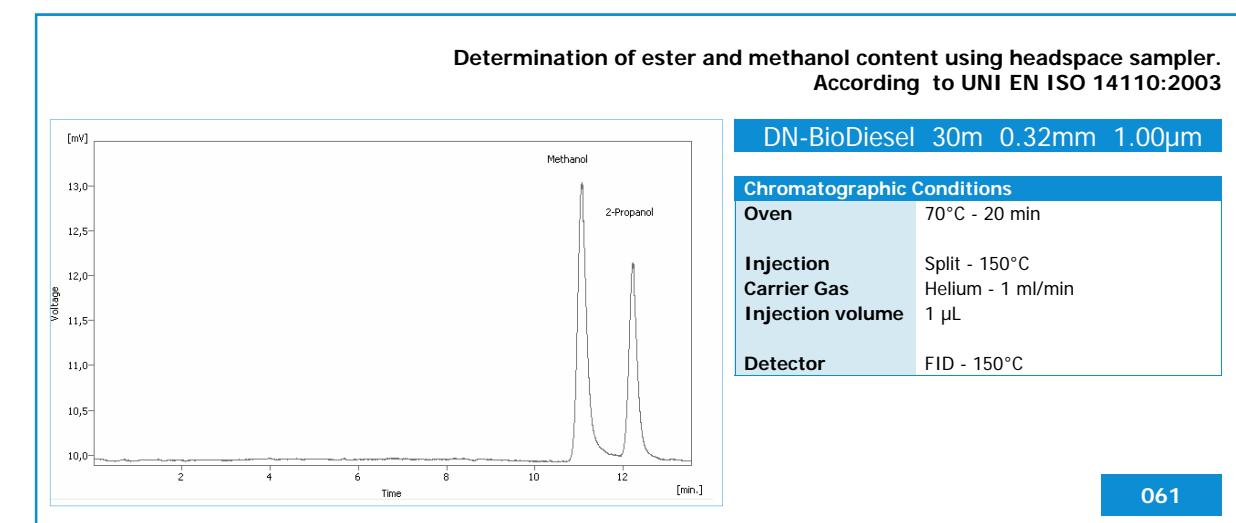
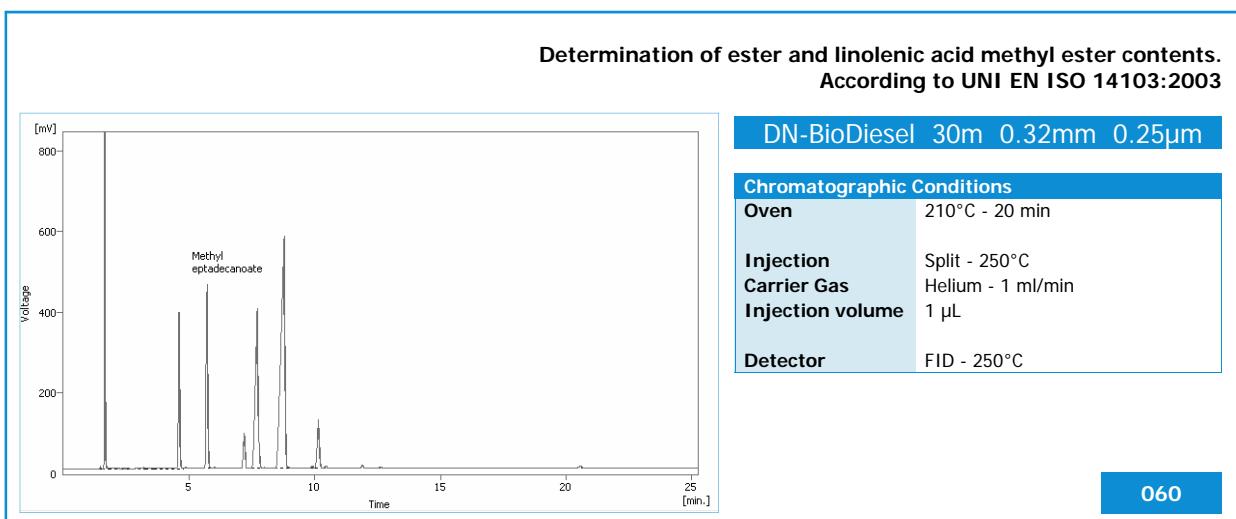
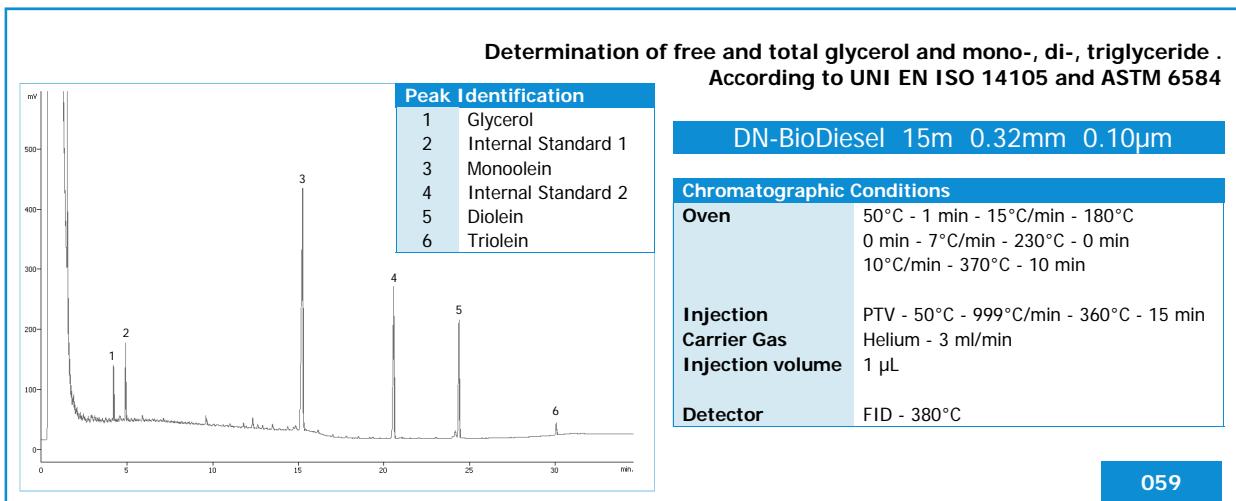
Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to NO EQUIVALENT



# DN-BioDiesel

## Chromatograms



## DN-PAH

15m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	350°C	9414.117 303	067

## DN-PAH

25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	350°C	9414.117 304	

## DN-PAH

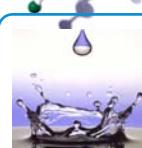
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-PAH Capillary Column

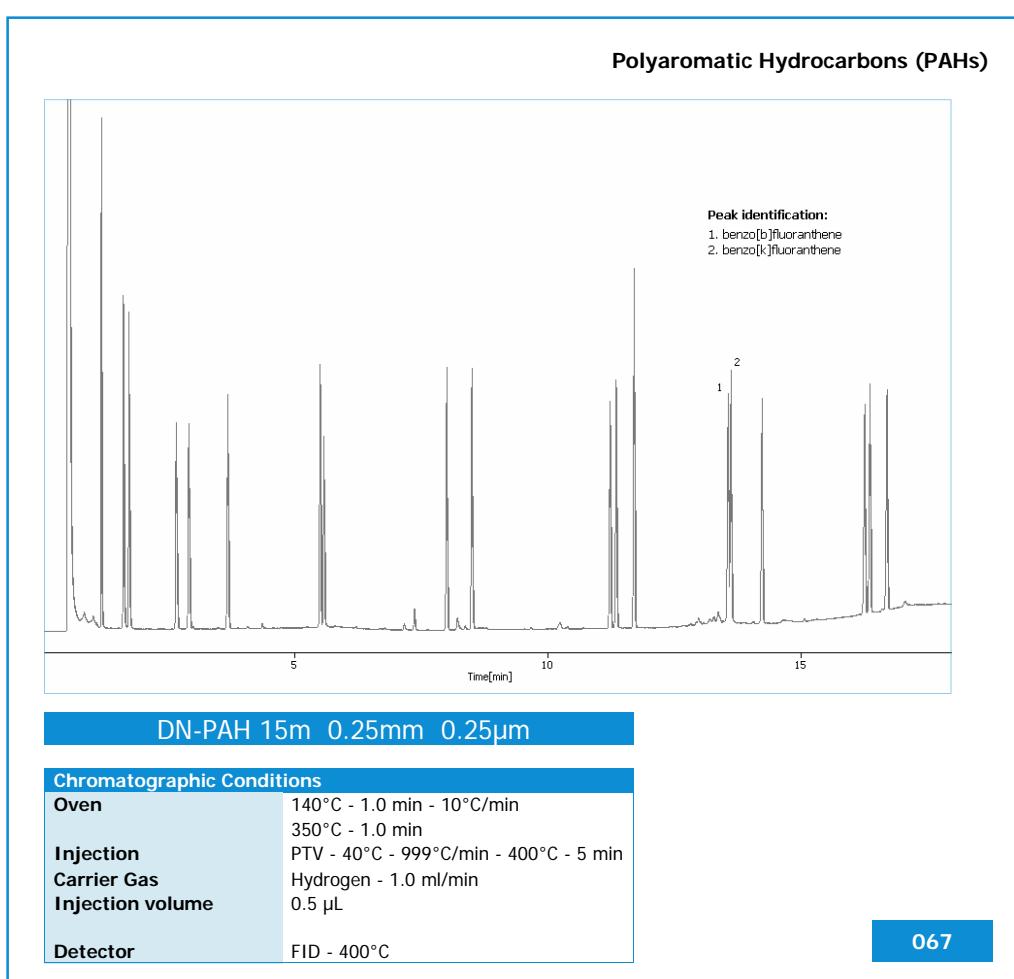
Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to NO EQUIVALENT



# DN-PAH

## Chromatograms



# **DN-PAH FAST**

Dedicated Columns

<b>DN-PAH FAST</b>		<b>15m</b>		
<b>ID</b>	<b>Film</b>	<b>Max Temp</b>	<b>Code</b>	<b>Chroma</b>
0.10mm	0.10µm	350°C	9414.117 302	066

## **DN-PAH FAST**

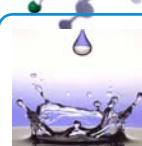
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-PAH FAST Capillary Column

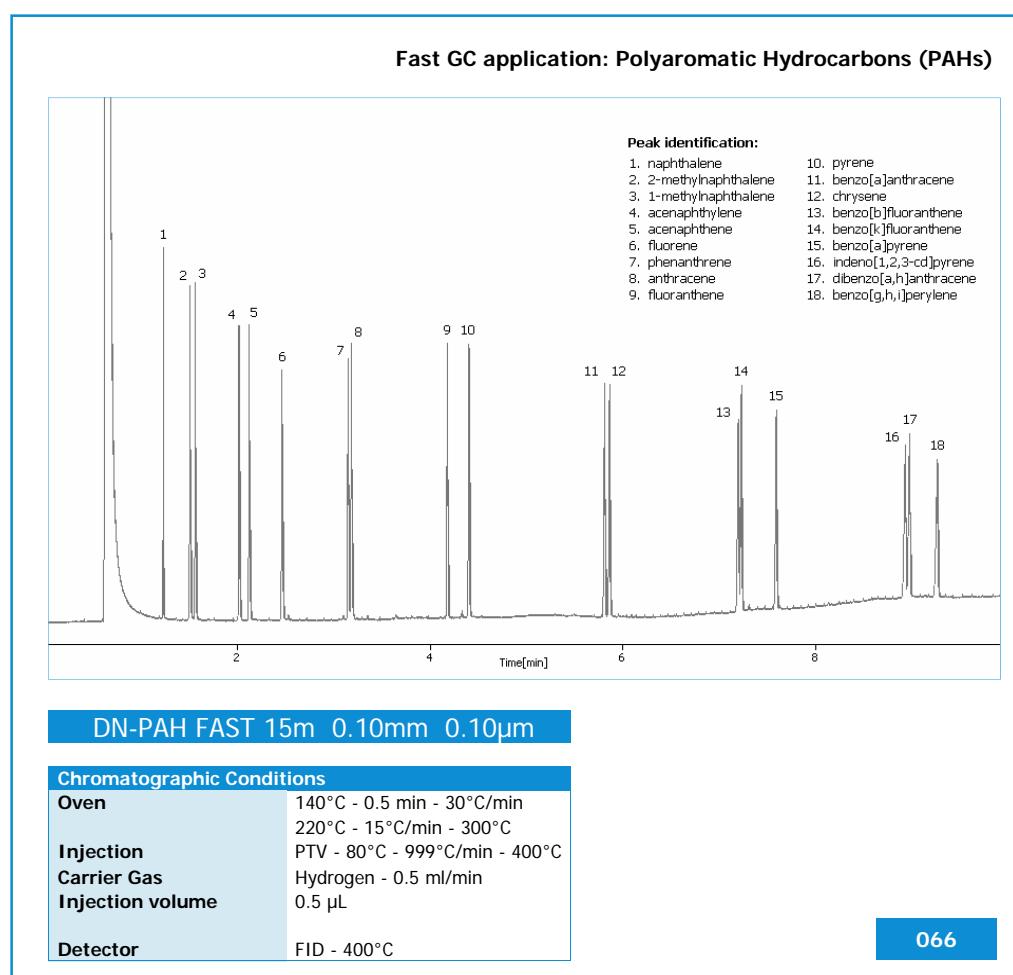
Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to      NO EQUIVALENT



# DN-PAH FAST

## Chromatograms



DN-SOLVE		50m		
ID	Film	Max Temp	Code	Chroma
0.32mm	0.25μm		9414.117 183	046

## DN-SOLVE

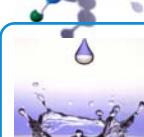
## Technical Specifications

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

DANI DN-SOLVE Capillary Column

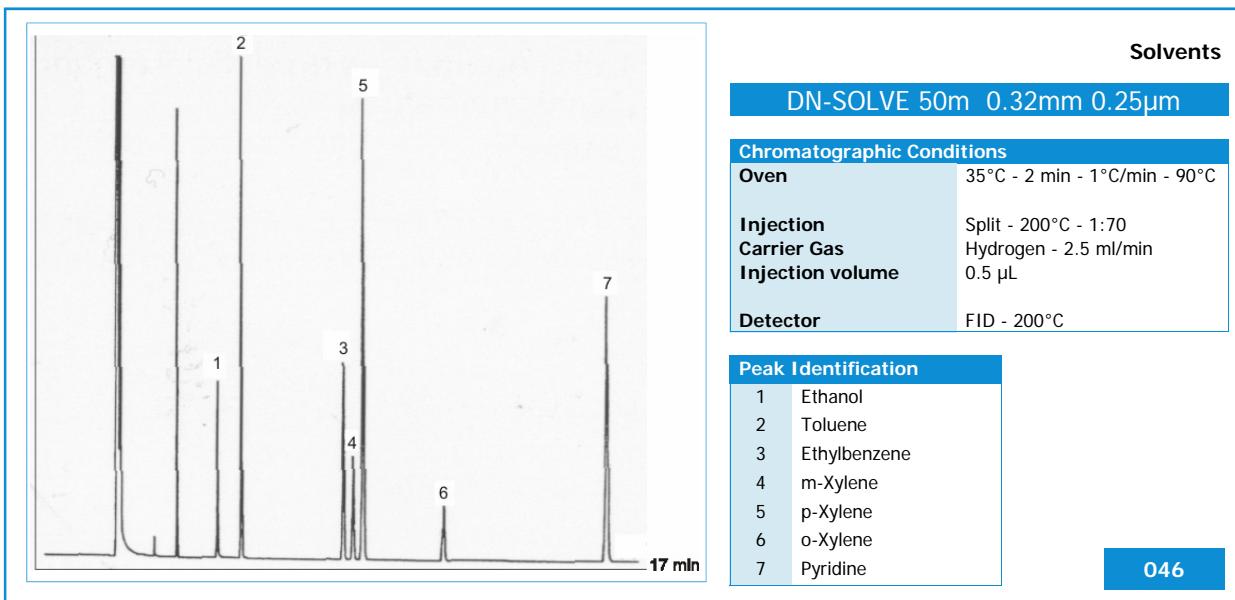
Bonded and cross-linked  
Inertness  
Low bleeding  
Good thermal stability

Similar to      NO EQUIVALENT



# DN-SOLVE

## Chromatograms

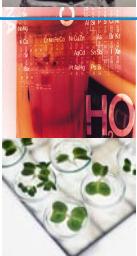
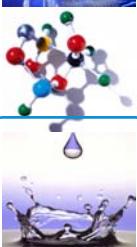


<b>Solvents</b>	<b>Retention Time</b>	<b>Solvents</b>	<b>Retention Time</b>	<b>Solvents List</b>
Heptane	2.50 min	Isobutyl alcohol	17.09 min	
n-Hexane	2.72 min	Nitromethane	17.43 min	
Ether Etilic	2.80 min	Nitroethane	17.86 min	
Cyclohexane	3.06 min	o-Xylene	18.12 min	
Methylformiate	3.40 min	1-Metossi 2-Propanol	20.81 min	
2,2-Dimetossi Propane	3.47 min	n-Butyl alcohol	22.08 min	
Methyl acetate	4.07 min	Nitropropane	22.38 min	
Acetone	4.08 min	Pyridine	24.49 min	
1,2-Epossi Butane	4.17 min	Methylcellosolve	25.84 min	
Carbon Tetrachloride	4.55 min	2-Metossi 3-Propanol	28.48 min	
1,1,1-TrichloroEthane	4.59 min	2-Methyl Pyridine	28.83 min	
Ethyl Acetate	5.01 min	Methylcellosolve Acetate	30.05 min	
Methyl Ethyl Ketone	5.45 min	Cellosolve	30.75 min	
Methylene Chloride	5.52 min	Cellosolve Acetate	34.70 min	
Benzene	5.80 min	3-Methyl Pyridine	37.03 min	
Methyl alcohol	6.60 min	N.N. Dimethylformamide	44.53 min	
Pinacolone	6.67 min	Diaceton alcohol	47.22 min	
Tertiary Butyl alcohol	7.08 min	N.N. Dimethyl Aniline	57.40 min	
Trieline	7.25 min	N.N. Dimethyl Acetamide	58.70 min	
Isopropylc alcohol	7.94 min	N.N. Diethyl Aniline	72.60 min	
Etilic alcohol	8.08 min			
Acetonitrile	8.57 min			
Chloroform	8.60 min			
Isobutyl acetate	8.87 min			
Ethyl Isobutyl Ketone	8.90 min			
Toluene	9.08 min			
Dioxane	11.77 min			
n-Butyl Acetate	12.07 min			
Secondary Butyl alcohol	12.70 min			
n-Propylic alcohol	13.42 min			
Ethyl Benzene	13.92 min			
m-Xylene	14.36 min			
p-Xylene	14.80 min			
Mesityl oxide	16.50 min			

**DN-SOLVE 50m 0.32mm 0.25μm**

**Chromatographic Conditions**

<b>Oven</b>	110°C - 8°C/min - 280°C
<b>Injection</b>	Split - 300°C - 1:100
<b>Carrier Gas</b>	Hydrogen - 60 kPa
<b>Injection volume</b>	1 μL
<b>Detector</b>	FID - 300°C



**DN-68****25m**

ID	Film	Max Temp	Code	Chroma
0.32mm	0.25μm		9414.117 184	047/061

**DN-68**

Technical Specifications

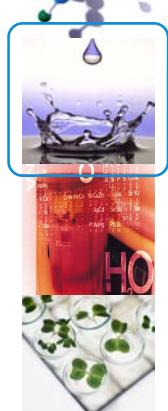


Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

DANI DN-68 Capillary Column

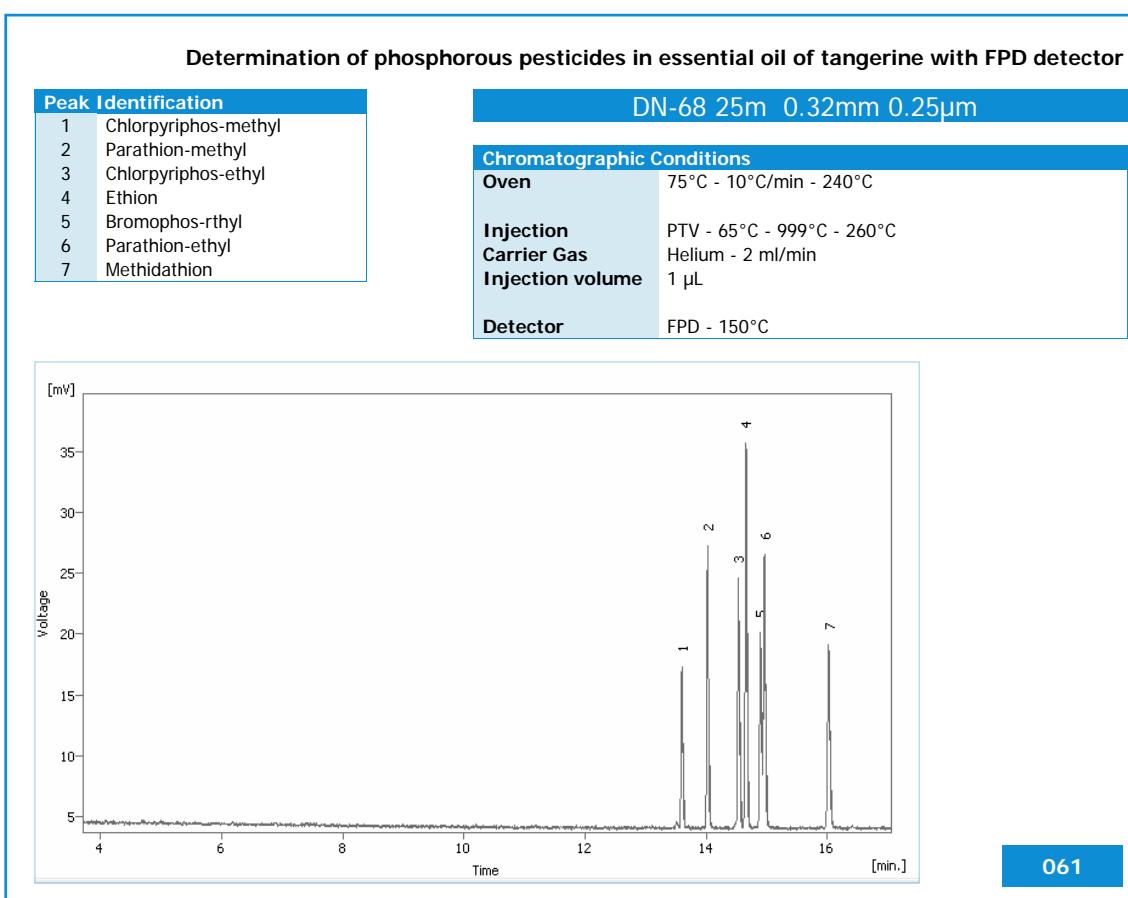
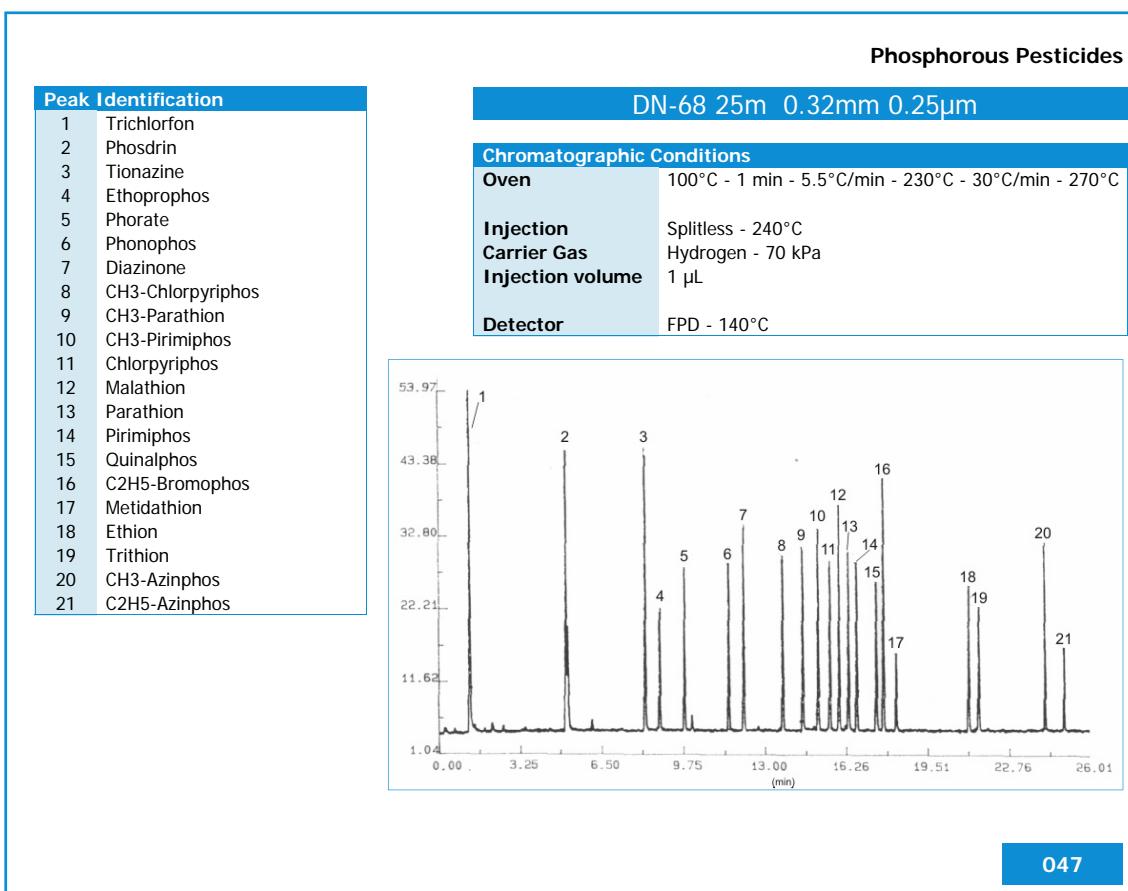
Bonded and cross-linked  
Inertness  
Low bleeding  
Good thermal stability

Similar to      NO EQUIVALENT



**DN-68**

## Chromatograms



DN-BASIC		25m		
ID	Film	Max Temp	Code	Chroma
0.32mm	0.25μm		9414.117 185	048

## DN-BASIC

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-BASIC Capillary Column

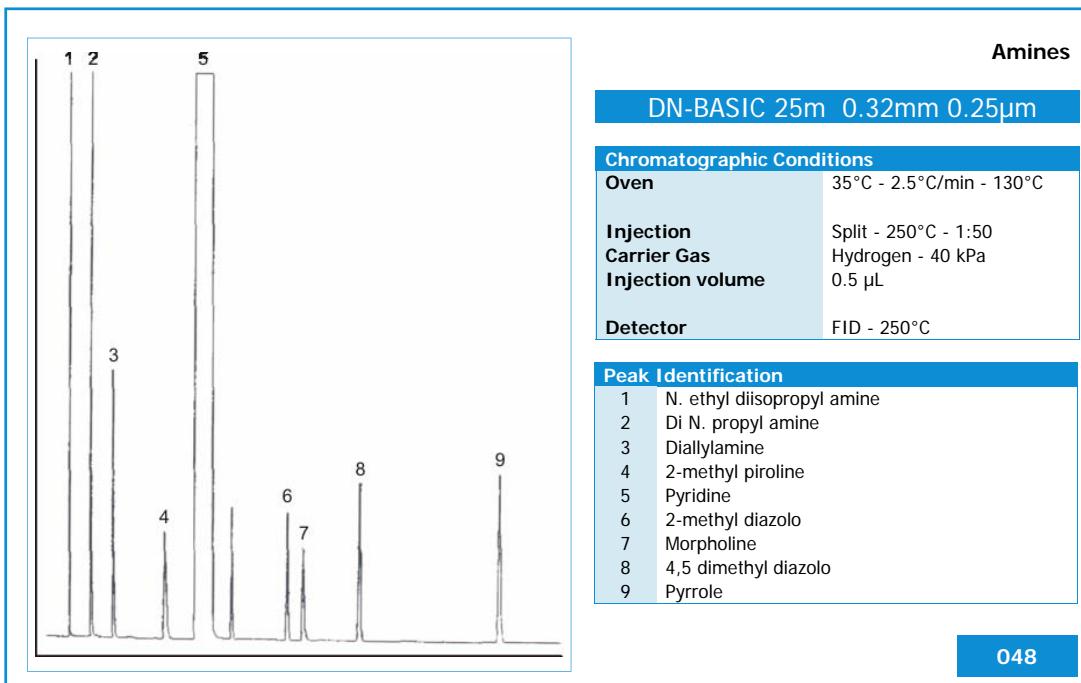
Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

Similar to      NO EQUIVALENT



# DN-BASIC

## Chromatograms



**DN-LAP**

**25m**

ID	Film	Max Temp	Code	Chroma
0.32mm	0.10µm		9414.117 186	049/050/051 052/053/054

**DN-LAP**

Technical Specifications

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

DANI DN-LAP Capillary Column

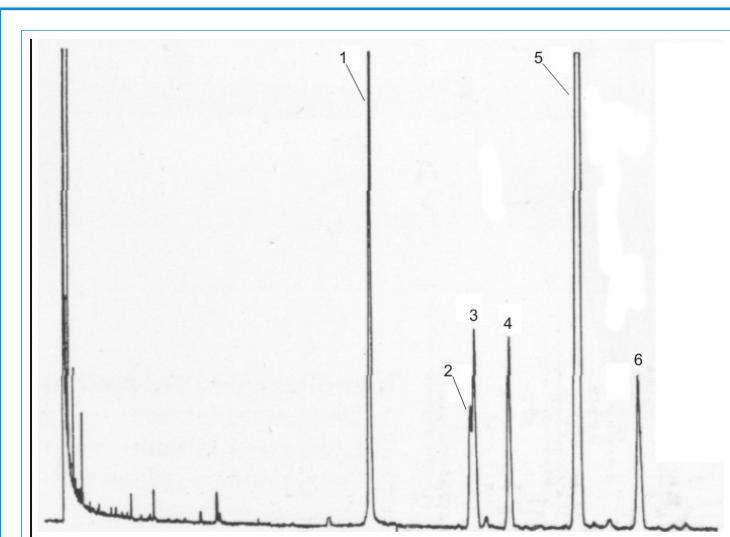
Bonded and cross-linked  
Inertness  
Low bleeding  
Good thermal stability

Similar to      NO EQUIVALENT



# DN-LAP

## Chromatograms



**Sterols TMS**  
**Peanut Oil**

DN-LAP 25m 0.32mm 0.10 $\mu$ m

### Chromatographic Conditions

**Oven** Isothermal 220°C

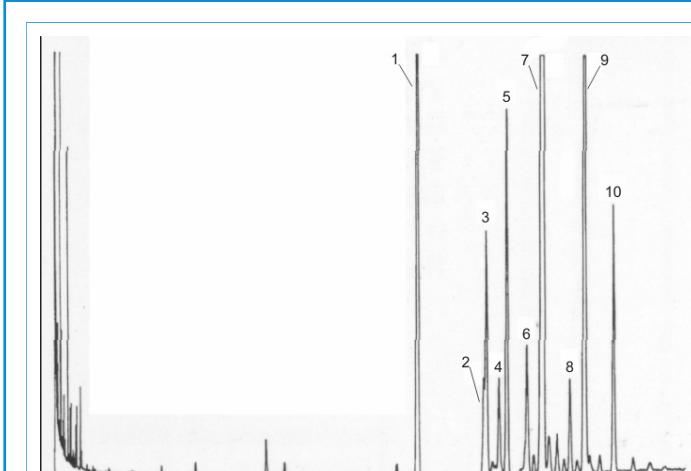
**Injection** Split - 300°C - 1:80  
**Carrier Gas** Hydrogen - 1.2 ml/min  
**Injection volume** 1  $\mu$ L

**Detector** FID - 300°C

### Peak Identification

1	alpha-colestanol (I.S.)
2	22,23-dihydrobrassicasterol
3	Campesterol
4	Stigmasterol
5	Sitosterol
6	D5-campesterol

049



**Sterols TMS**  
**Sunflower Oil**

DN-LAP 25m 0.32mm 0.10 $\mu$ m

### Chromatographic Conditions

**Oven** Isothermal 220°C

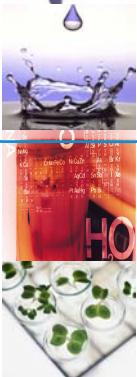
**Injection** Split - 300°C - 1:80  
**Carrier Gas** Hydrogen - 1.2 ml/min  
**Injection volume** 1  $\mu$ L

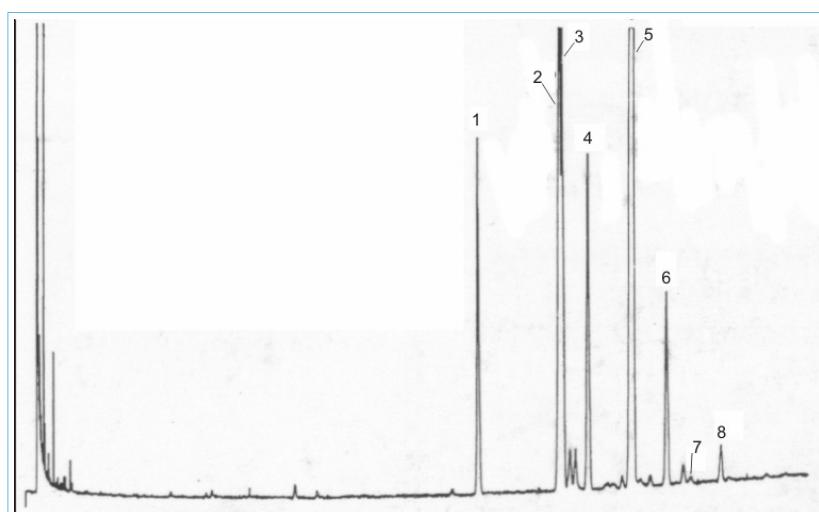
**Detector** FID - 300°C

### Peak Identification

1	alpha-colestanol (I.S.)
2	22,23-dihydrobrassicasterol
3	Campesterol
4	<i>Incognito</i>
5	Stigmasterol
6	D7-campesterol
7	Sitosterol
8	D5-avenasterol
9	D7-stigmastenol
10	D7-avenasterol

050



Sterols TMS  
Mais Oil

DN-LAP 25m 0.32mm 0.10µm

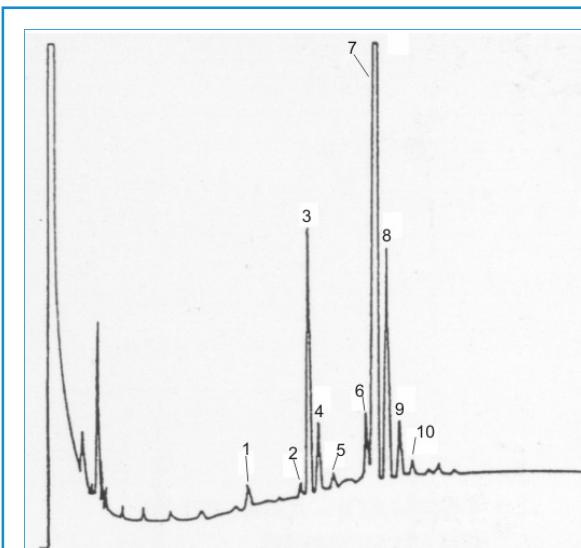
## Chromatographic Conditions

Oven	Isothermal 220°C
Injection	Split - 300°C - 1:80
Carrier Gas	Hydrogen - 1.2 ml/min
Injection volume	1 µL
Detector	FID - 300°C

## Peak Identification

1	alpha-colestanol (I.S.)
2	22,23-diidrobrassicasterol
3	Campesterol
4	Stigmasterol
5	Sitosterol
6	D5-avenasterol
7	D7-stigmastenol
8	D7-avenasterol

051



Triglycerides - Hazelnut Oil

DN-LAP 25m 0.32mm 0.10µm

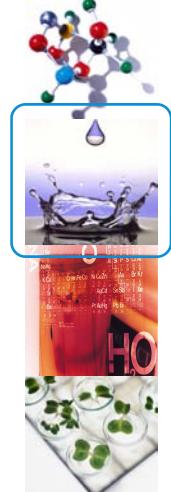
## Chromatographic Conditions

Oven	Isothermal 220°C
Injection	Split - 300°C - 1:80
Carrier Gas	Hydrogen - 1.2 ml/min
Injection volume	1 µL
Detector	FID - 300°C

## Peak Identification

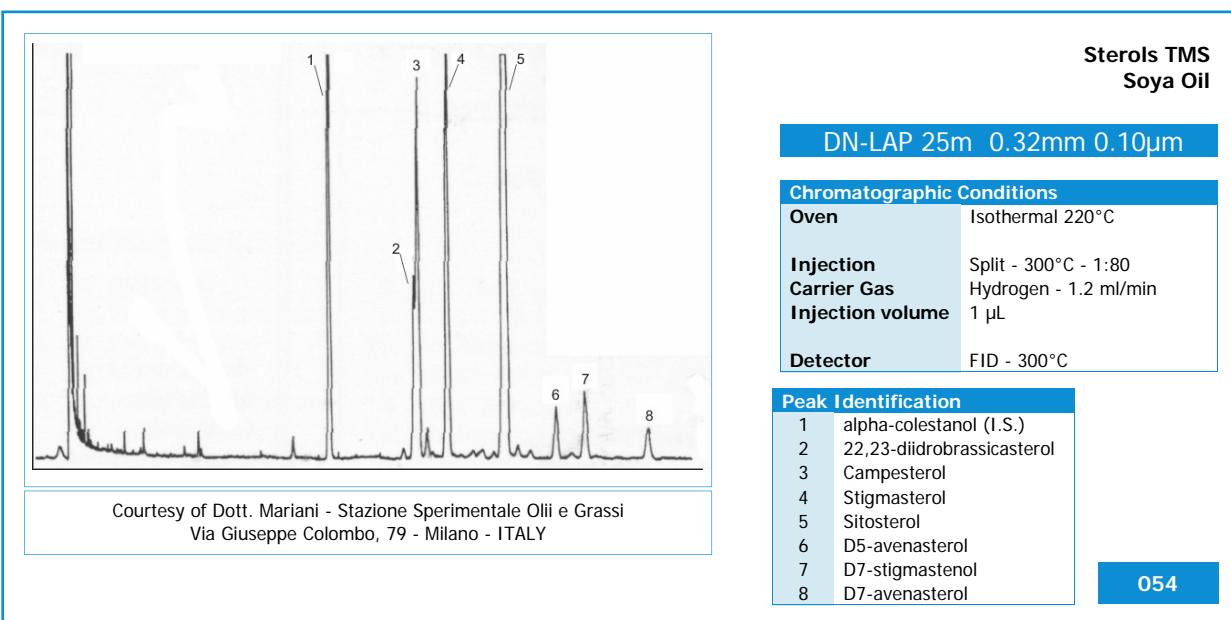
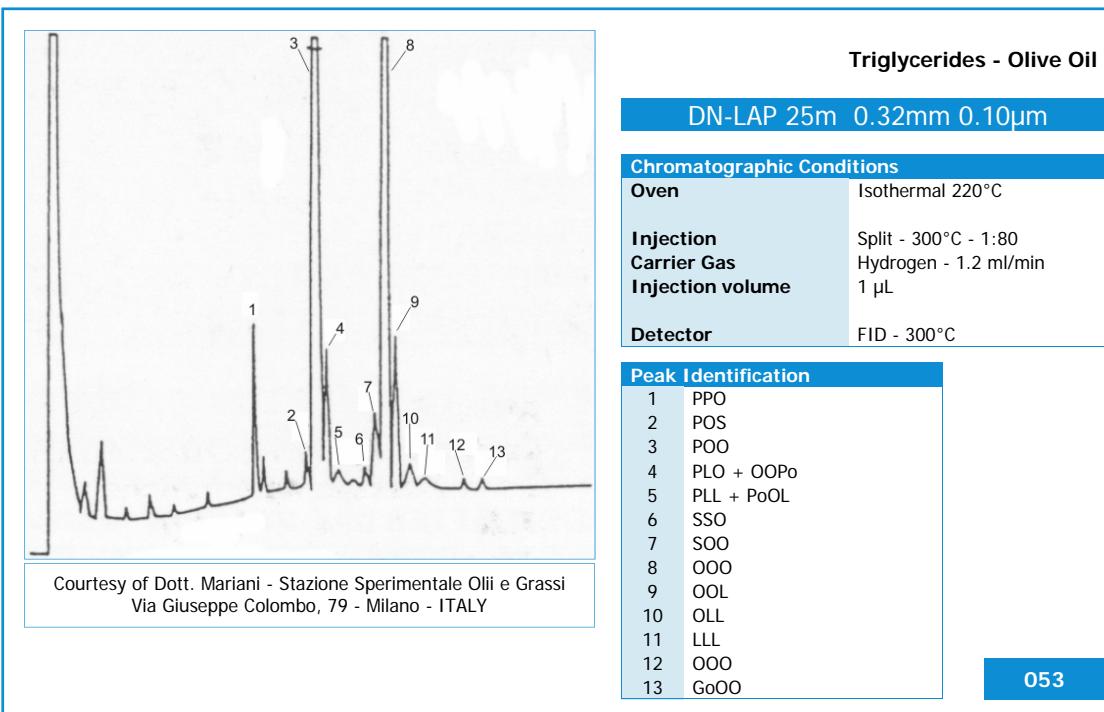
1	PPO
2	POS
3	POO
4	PLO + OOPo
5	PLL + PoOL
6	8OO
7	OOO
8	OOL
9	OOL
10	LLL

052



# DN-LAP

## Chromatograms



**DN-Beta 1**      **10m**

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 171	

**DN-Beta 1**      **25m**

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 172	

**DN-Beta 1**

## Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-Beta 1 Chiral Capillary Column  
 Dimethyl Tert Butyl Silyl BETA Cyclodextrine  
 Chiral  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability



# DN-Beta 2

Chiral Columns

## DN-Beta 2 10m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 173	

## DN-Beta 2 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 174	055



## DN-Beta 2

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

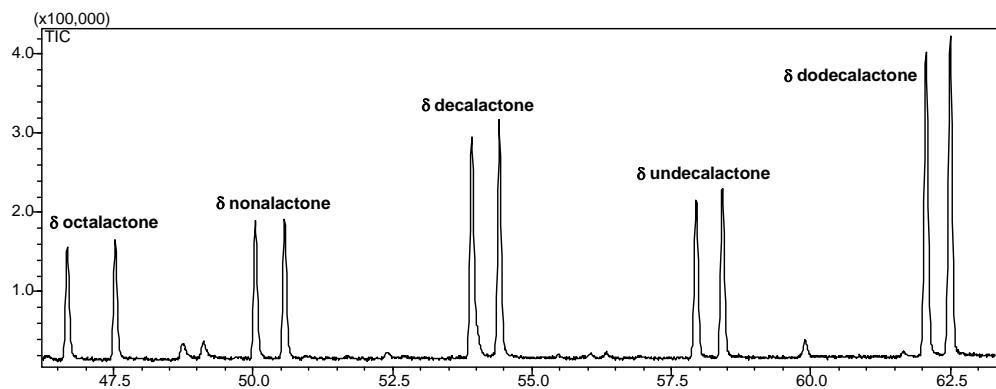
DANI DN-Beta 2 Chiral Capillary Column  
 Diacetyl Tert Butyl Silyl BETA Cyclodextrine  
 Chiral  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

DN-Beta 2 25m 0.25mm 0.25μm

Delta Lactones - C8-C12

## Chromatographic Conditions

Oven	80°C - 1.5°C/min - 200°C
Injection	Split - 250°C - 1:70
Carrier Gas	Hydrogen - 70 kPa
Injection volume	1 μL
Detector	FID - 250°C



Courtesy of Prof. C. Bicchi, C. Brunelli  
Università di Torino - Dipartimento Scienza e Tecnologia del Farmaco Via P. Giuria, 9 - Torino - ITALY

055



# DN-Beta 3

## Chiral Columns

### DN-Beta 3 10m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 175	

### DN-Beta 3 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 176	056



### DN-Beta 3

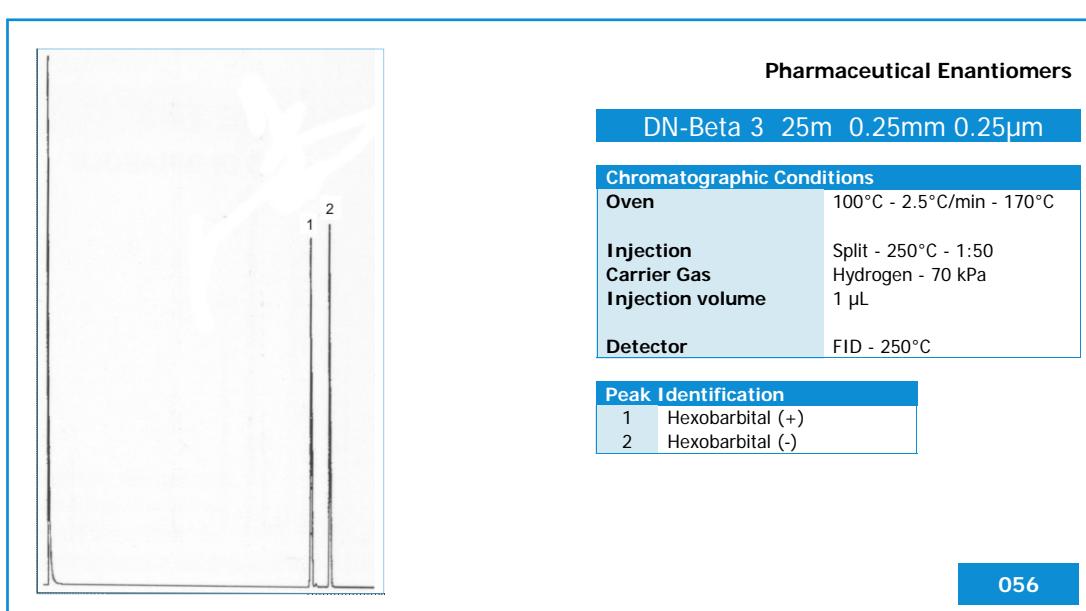
[Technical Specifications](#)

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-Beta 3 Chiral Capillary Column  
 Dimethyl Pentyl BETA Cyclodextrine  
 Chiral  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

## DN-Beta 3

## Chromatograms



# DN-Beta 4

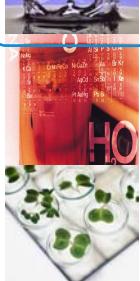
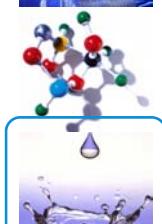
Chiral Columns

## DN-Beta 4 10m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 177	

## DN-Beta 4 25m

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 178	057/058



## DN-Beta 4

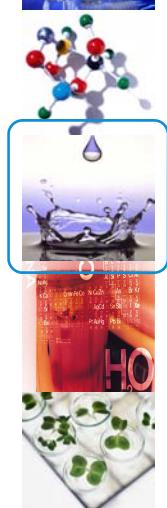
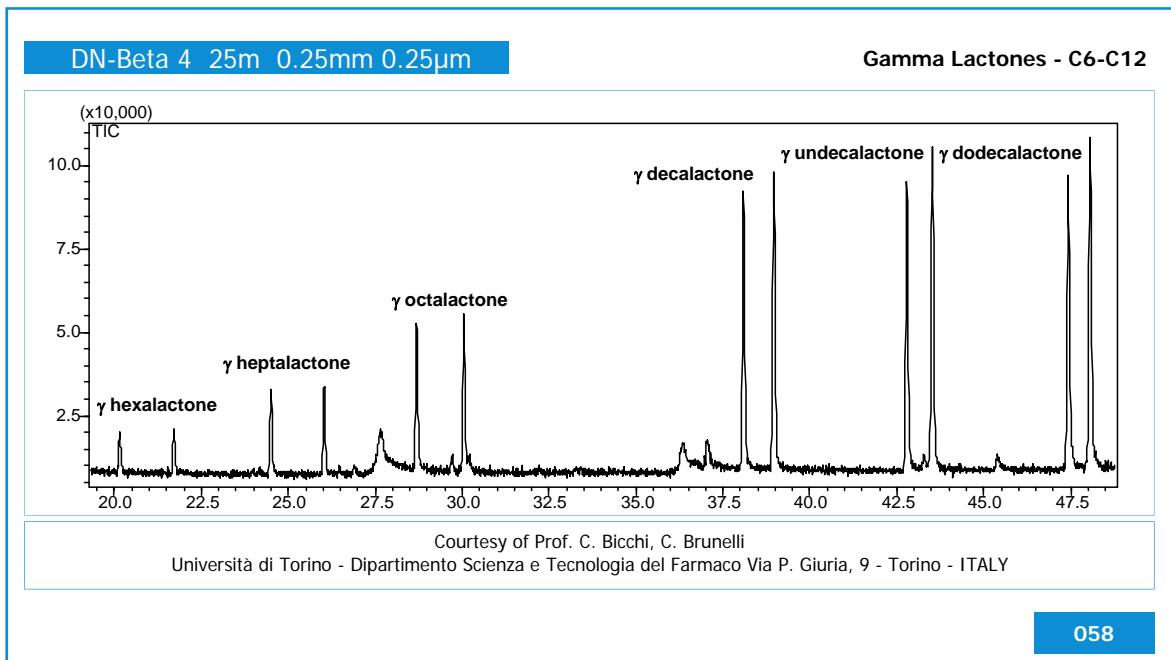
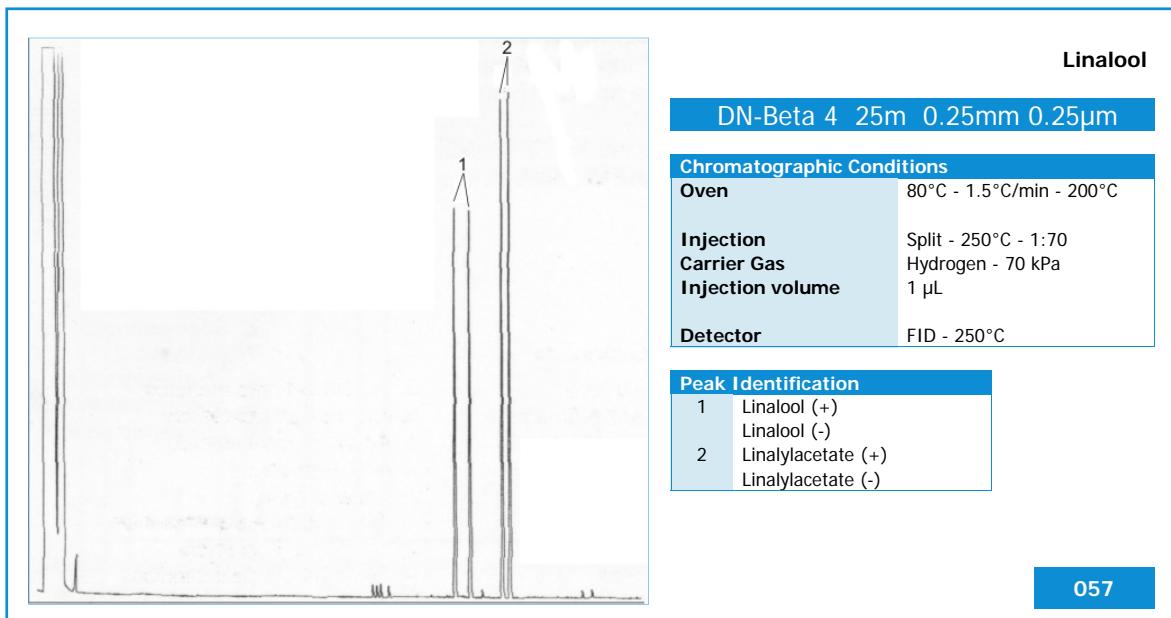
Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-Beta 4 Chiral Capillary Column  
 Diethyl Tert Butyl Silyl BETA Cyclodextrine  
 Chiral  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

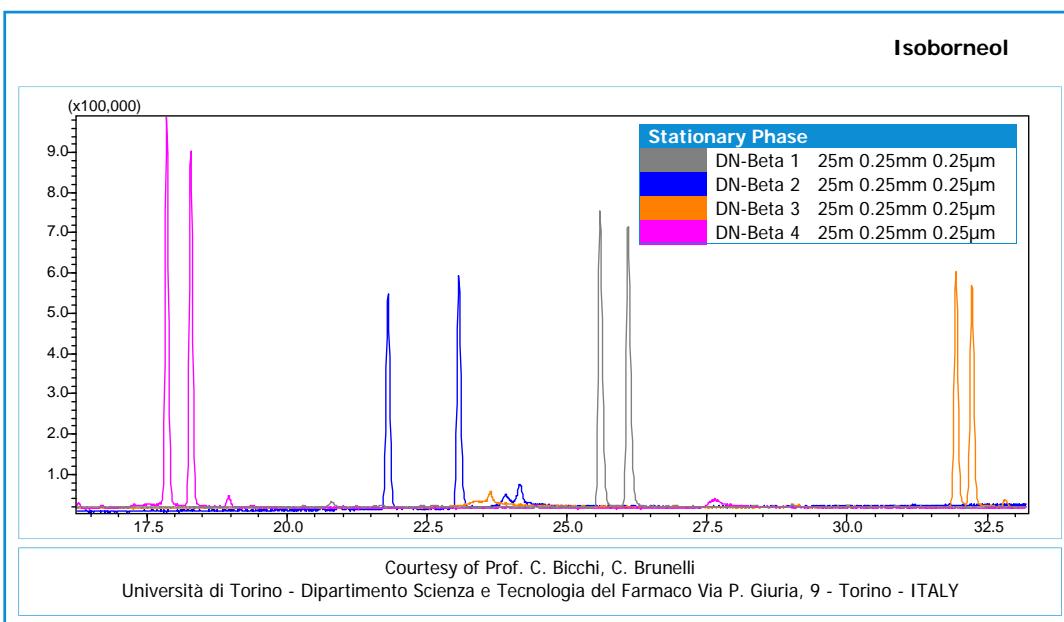
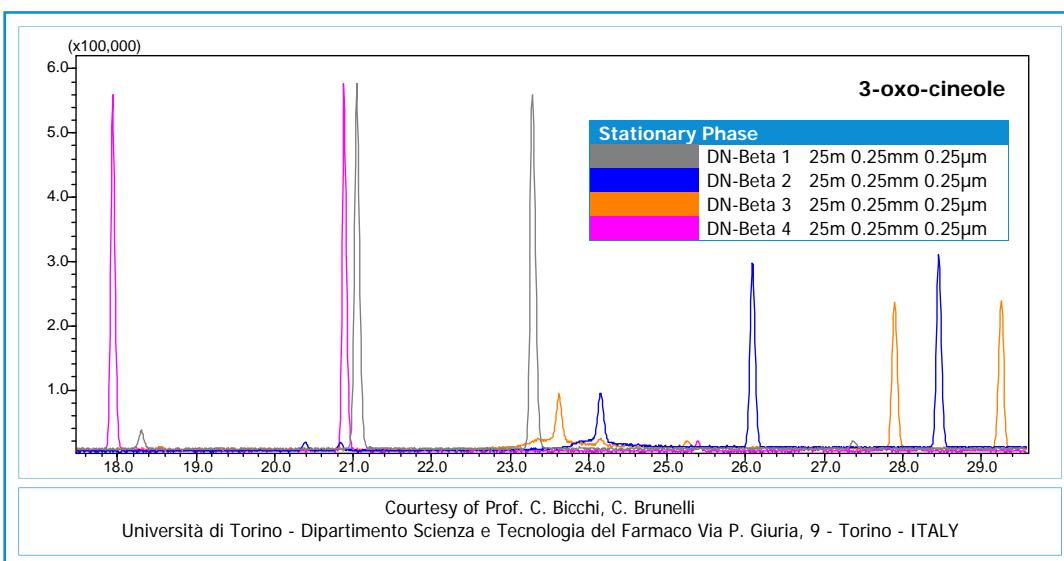
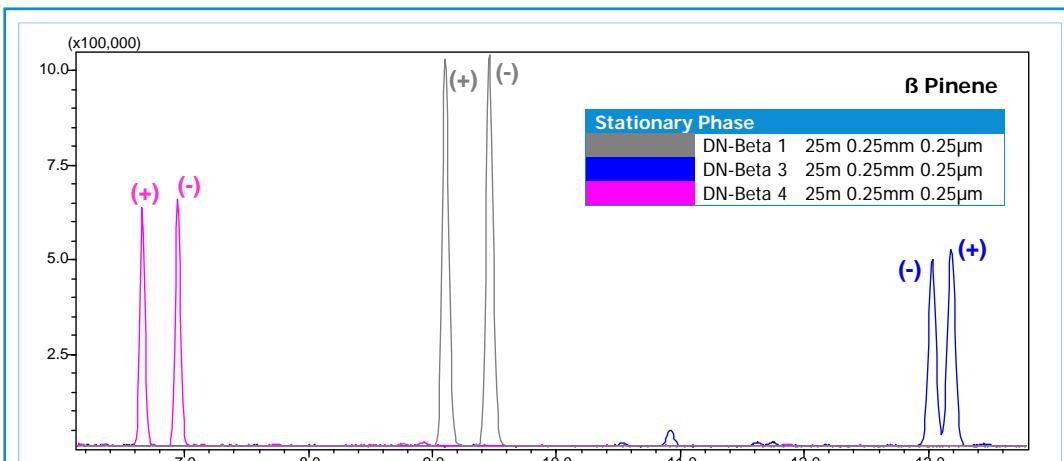
## DN-Beta 4

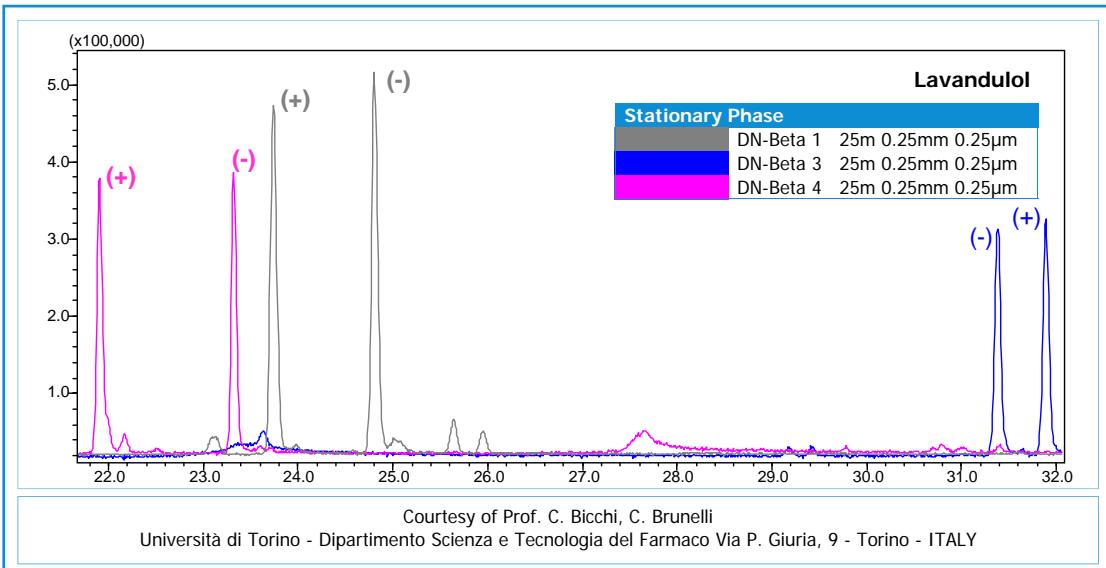
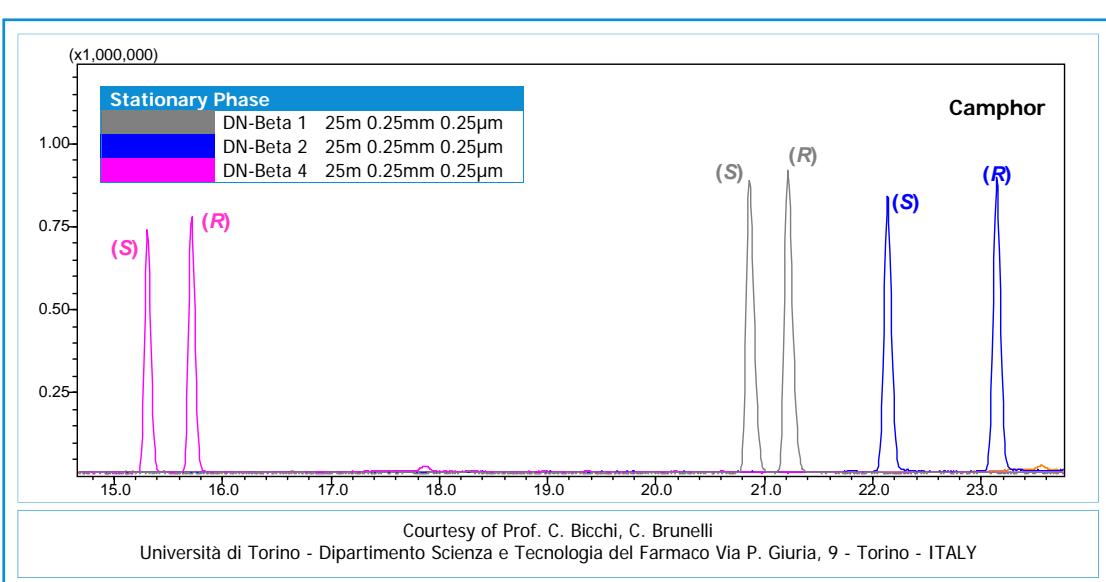
Chromatograms



# DN-Beta

## Chromatograms



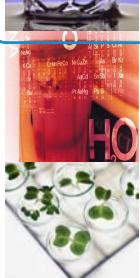


# DN-Gamma 1

Chiral Columns

DN-Gamma 1				
10m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 179	

DN-Gamma 1				
25m				
ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 180	



## DN-Gamma 1 Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-Gamma 1 Chiral Capillary Column  
 Diacetyl Tert Butyl Silyl GAMMA Cyclodextrine  
 Chiral  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability

## **DN-Gamma 2**

Chiral Columns

### **DN-Gamma 2                    10m**

ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 181	

### **DN-Gamma 2                    25m**

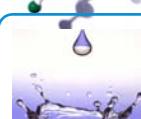
ID	Film	Max Temp	Code	Chroma
0.25mm	0.25µm	230°C	9414.117 182	

### **DN-Gamma 2**

Technical Specifications

Every Column Individually Tested  
 Test Certified and Grob Mixture included in each Column  
 Instruction Manual included in each Column

DANI DN-Gamma 2 Chiral Capillary Column  
 Diethyl Tert Butyl Silyl GAMMA Cyclodextrine  
 Chiral  
 Bonded and cross-linked  
 Inertness  
 Low bleeding  
 Good thermal stability



# New GC Capillary Columns

## New Columns

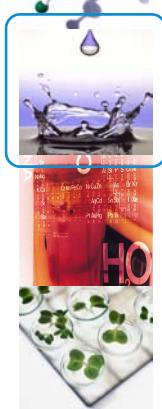
Stationary Phase	Length	ID	Film	Max Temp	Polarity	Code	Chroma
DN-5	10 meters	0.32mm	0.10µm	350°C	Non-polar	9414.116 124	
DN-1	10 meters	0.53mm	1.00µm	330°C	Non-polar	9414.117 187	005/006/009
DN-5	10 meters	0.53mm	1.00µm	330°C	Non-polar	9414.117 188	021
DN-1	10 meters	0.53mm	2.65µm	320°C	Non-polar	9414.117 189	
DN-1	15 meters	0.32mm	0.10µm	350°C	Non-polar	9414.117 190	
DN-5	15 meters	0.32mm	0.10µm	350°C	Non-polar	9414.117 191	
DN-5	30 meters	0.53mm	2.65µm	320°C	Non-polar	9414.117 305	
DN-WAX	10 meters	0.53mm	1.20µm	250°C	Polar	9414.117 306	
DN-1	10 meters	0.53mm	0.10µm	350°C	Non-polar	9414.117 307	
DN-624	60 meters	0.32mm	1.80µm	250°C	Intermediate	9414.117 308	
DN-1	10 meters	0.25mm	1.00µm	330°C	Non-polar	9414.117 309	
DN-624	30 meters	0.32mm	1.80µm	250°C	Intermediate	9414.117 310	
DN-WAX	25 meters	0.53mm	1.20µm	250°C	Polar	9414.117 395	
DN-SAFE 1	4m + RG 2m	0.32mm	0.10µm	350°C	Non-polar	9414.117 396	
DN-35	30 meters	0.25mm	0.25µm	350°C	Intermediate	9414.117 397	
DN-1	100 meters	0.25mm	1.00µm	330°C	Non-polar	9414.117 398	
DN-1	30 meters	0.53mm	2.65µm	320°C	Non-polar	9414.117 399	



## Technical Specifications

Every Column Individually Tested  
Test Certified and Grob Mixture included in each Column  
Instruction Manual included in each Column

Please refer to previous Stationary Phase Technical Specifications



To order **STANDARD** Retention Gaps and Press Fit please specify only the  
**Part Number**

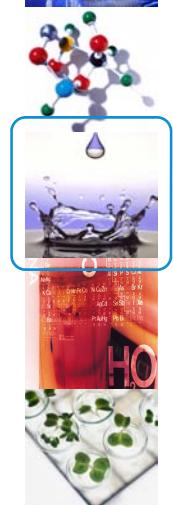
Maximum Temperature	Deactivation	Part Number
<b>Retention Gaps</b>		
1m		
<b>Internal Diameter</b>		Length
ID	Max Temp	Deactivation
0.25mm	350°C	DPTMDS
0.32mm	350°C	DPTMDS
0.53mm	350°C	DPTMDS

On request DANI Instruments can supply **Retention Gaps**  
with different length or diameter

To order **CUSTOM** Retention Gap please specify

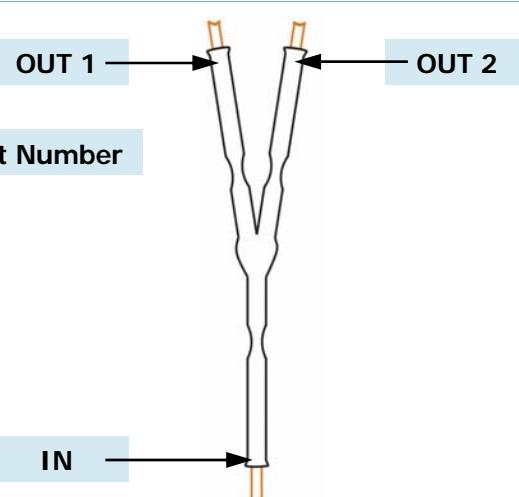
**Internal Diameter + Length**

Package	Part Number
<b>Press Fit Unions</b>	
ID 1	ID 2
0.05mm	0.05mm
0.05mm	0.10mm
0.05mm	0.25mm
Set of	
10 pieces	9012.100 001
10 pieces	9012.100 002
10 pieces	9012.100 003
Code	

**Press Fit Y 3-ways**

IN	OUT 1	OUT 2	Code
0.05mm	0.05mm	0.05mm	9012.200 001
0.05mm	0.05mm	0.10mm	9012.200 002
0.05mm	0.05mm	0.25mm	9012.200 003



## Retention Gaps

## Press Fit Unions

## Press Fit Y 3-way

Retention Gaps		1m	
ID	Max Temp	Deactivation	Code
0.25mm	350°C	DPTMDS	9012.000 001
0.32mm	350°C	DPTMDS	9012.000 002
0.53mm	350°C	DPTMDS	9012.000 003
0.25mm	350°C	HMDS	9012.001 001
0.32mm	350°C	HMDS	9012.001 002
0.53mm	350°C	HMDS	9012.001 003
0.25mm	280°C	CARBOWAX 20M	9012.002 001
0.32mm	280°C	CARBOWAX 20M	9012.002 002
0.53mm	280°C	CARBOWAX 20M	9012.002 003

## Press Fit Unions

ID 1	ID 2	Set of	Code
0.25mm	0.25mm	10 pieces	9012.100 001
0.25mm	0.32mm	10 pieces	9012.100 002
0.25mm	0.53mm	10 pieces	9012.100 003
0.32mm	0.32mm	10 pieces	9012.100 004
0.32mm	0.53mm	10 pieces	9012.100 005
0.53mm	0.53mm	10 pieces	9012.100 006

## Retention Gaps

### Technical Specifications

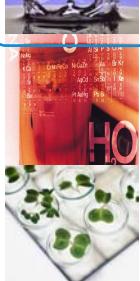
Retention Gap deactivated DPTMDS: for General Use  
 Retention Gap deactivated HMDS: for Non Polar solvents  
 Retention Gap deactivated CARBOWAX 20M: for Polar solvents  
 Retention Gap material: Fused Silica

## Press Fit Y 3-ways

IN	OUT 1	OUT 2	Code
0.25mm	0.25mm	0.25mm	9012.200 001
0.25mm	0.25mm	0.32mm	9012.200 002
0.25mm	0.25mm	0.53mm	9012.200 003
0.25mm	0.32mm	0.32mm	9012.200 004
0.25mm	0.32mm	0.53mm	9012.200 005
0.25mm	0.53mm	0.53mm	9012.200 006
0.32mm	0.25mm	0.25mm	9012.200 007
0.32mm	0.25mm	0.32mm	9012.200 008
0.32mm	0.25mm	0.53mm	9012.200 009
0.32mm	0.32mm	0.32mm	9012.200 010
0.32mm	0.32mm	0.53mm	9012.200 011
0.32mm	0.53mm	0.53mm	9012.200 012
0.53mm	0.25mm	0.25mm	9012.200 013
0.53mm	0.25mm	0.32mm	9012.200 014
0.53mm	0.25mm	0.53mm	9012.200 015
0.53mm	0.32mm	0.32mm	9012.200 016
0.53mm	0.32mm	0.53mm	9012.200 017
0.53mm	0.53mm	0.53mm	9012.200 018

## Press Fit 4 or 5 ways

Available on request special  
 4 or 5 ways fused silica Press Fits



To order DANI GC Packed column please specify

Packed Column + Length + Stationary Phase

**Empty Packed Columns (\*\*)**

Description	O.D. (mm)	I.D. (mm)
Glass	6	2
Glass	6	3
<b>Stainless Steel</b>	<b>4</b>	<b>2</b>
Stainless Steel	4	3
Stainless Steel	6	4

**Stationary Phases**

Description	Mesh	Max Temp
Porapak PS	80/100	250°C
<b>Porapak Q</b>	<b>80/100</b>	250°C
Porapak Q-S	80/100	250°C
Porapak R	80/100	250°C

Column Stainless Steel 4x2mm 2 meters Porapak Q 80/100 mesh

Packed Column + Length + Liquid Stationary Phase + % Liquid Stationary Phase + Support

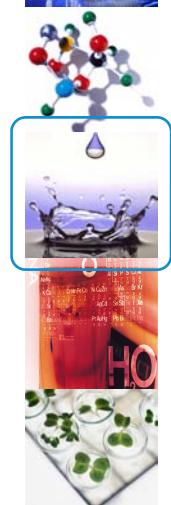
**Empty Packed Columns (\*\*)**

Description	O.D. (mm)	I.D. (mm)
Glass	6	2
Glass	6	3
<b>Stainless Steel</b>	<b>4</b>	<b>2</b>
Stainless Steel	4	3
Stainless Steel	6	4

**Stationary Phases**

Description	Min Temp	Max Temp
Carbowax™ 200	Amb. Temp.	100°C
Carbowax™ 400	Amb. Temp.	125°C
Carbowax™ 600	Amb. Temp.	125°C
Carbowax™ 1000	40°C	200°C
Carbowax™ 1500	40°C	200°C
Carbowax™ 1540	40°C	200°C
Carbowax™ 4000	60°C	200°C
Carbowax™ 6000	60°C	200°C
<b>Carbowax™ 20M</b>	60°C	220°C
SE-30	50°C	300°C
SE-52	50°C	300°C
SE-54	100°C	300°C
Neo-pentylglycol adipate LAC 9R 769	50°C	220°C

Column Stainless Steel 4x2mm 2 meters Carbowax™ 20M 5% Chromosorb W HP 80/100 mesh



**Empty Packed Columns**  
**Stationary Phases**
**Empty Packed Columns (\*\*)**

Description	O.D. (mm)	I.D. (mm)
Glass	6	2
Glass	6	3
Stainless Steel	4	2
Stainless Steel	4	3
Stainless Steel	6	4

(\*\*) Only for DANI GC8610, GC1000, MASTER GC

**Stationary Phases**

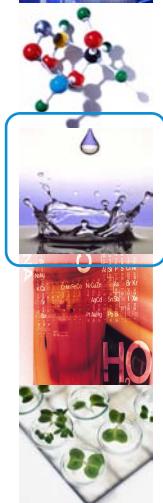
Description	Maglie/cm <sup>2</sup>	Activation Temp
Activated Alumina	260/1600	100°C/24h
Activated Charcoal	200/400	150°C/24h
Fluorisil	590/1600	150°C/2h
Silica Gel	510/1100	150°C/24h
Molecular Sieve 5A	200/1100	250°C/24h
Molecular Sieve 5A spheres		250°C/24h
Molecular Sieve 13X	200/1100	250°C/24h
Silica Gel + Octoil S (3%)		130°C/24h
Spherosil		150°C/24h

**Stationary Phases**

Description	Min Temp	Max Temp
Acetonyacetone	10°C	20°C
Alkaterge	50°C	75°C
Tensioactive Amine		
Silver Nitrate	Amb. Temp.	75°C
Armeen SD	30°C	100°C
Primary apliphatic amine		
Aroclor 1232	50°C	110°C
Byphenil chlorate		
Bentone 34	Amb. Temp.	200°C
Dimethyldioctadecylammonium		
Bentonite		
Bentone 34 in mix 1:1 with didecylphthalate	Amb. Temp.	150°C
7-8 Benzochinoline	50°C	150°C
Bis(2(2-Metossietossi)Ethyl) Ether	Amb. Temp.	50°C
Bis(2-Metossi-Ethyl)-Adipate	Amb. Temp.	150°C

**Stationary Phases**

Description	Mesh	Max Temp
Chromosorb® 101	100/120	275°C
Chromosorb® 101	80/100	275°C
Chromosorb® 101	60/80	275°C
Chromosorb® 102	100/120	250°C
Chromosorb® 102	80/100	250°C
Chromosorb® 102	60/80	250°C
Chromosorb® 103	100/120	275°C
Chromosorb® 103	80/100	275°C
Chromosorb® 103	60/80	275°C
Chromosorb® 104	100/120	250°C
Chromosorb® 104	80/100	250°C
Chromosorb® 104	60/80	250°C
Chromosorb® 105	100/120	250°C
Chromosorb® 105	80/100	250°C
Chromosorb® 105	60/80	250°C
Chromosorb® 106	100/120	250°C
Chromosorb® 106	80/100	250°C
Chromosorb® 106	60/80	250°C
Chromosorb® 107	100/120	250°C
Chromosorb® 107	80/100	250°C
Chromosorb® 107	60/80	250°C
Chromosorb® 108	100/120	250°C
Chromosorb® 108	80/100	250°C
Chromosorb® 108	60/80	250°C
Porapak P	80/100	250°C
Porapak PS	80/100	250°C
Porapak Q	80/100	250°C
Porapak Q-S	80/100	250°C
Porapak R	80/100	250°C
Porapak S	80/100	250°C
Porapak N	80/100	190°C
Porapak T	80/100	190°C

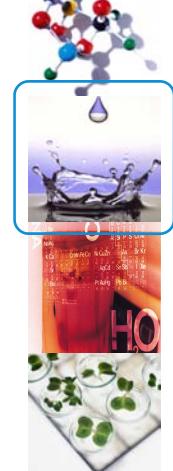


## Stationary Phases

Description	Min Temp	Max Temp
Butanediol Succinate LAC 860	50°C	225°C
Bβ' oxidipropionitrile	Amb. Temp.	100°C
Celanese ester 9	20°C	200°C
Cyclohexane dimethanol succinate LAC 796	100°C	210°C
Dexil 300 Carborane methyl silicone	50°C	500°C
Dexil 400 Carborane methyl phenyl silicone	50°C	500°C
Dexil 410 Carborane methyl ciano ethyl silicone	50°C	500°C
Dibenzyl ether	Amb. Temp.	50°C
Dibutylphthalate	Amb. Temp.	125°C
Diethylenglycol adipate LAC 296	Amb. Temp.	200°C
Di-2-Ethylhexyl sebacate Octoil-S	Amb. Temp.	125°C
Didecylphthalate	Amb. Temp.	160°C
Diglycerol	Amb. Temp.	120°C
Dimethylsulpholane	Amb. Temp.	50°C
Dinonylphthalate	Amb. Temp.	150°C
Epikote 728 Epossidic Resin	50°C	200°C
Epon 1001 Epossidic Resin	75°C	250°C
Diethylenglycol adipate LAC 446	50°C	190°C
Ethylenglycol adipate LAC 741	Amb. Temp.	260°C
Ethylenglycol glutarate LAC 737	50°C	200°C
Ethylenglycol isophthalate LAC 7R745	50°C	220°C
Ethylenglycol succinate LAC 728	Amb. Temp.	200°C
Ethofat 60/25 polyoxyethylene monostearate	50°C	120°C
Phenilacetonitrile	Amb. Temp.	40°C
FFAP	50°C	250°C
Flexol 8N8	Amb. Temp.	180°C
Glycerine	Amb. Temp.	75°C
Carbowax™ 200	Amb. Temp.	100°C
Carbowax™ 400	Amb. Temp.	125°C
Carbowax™ 600	Amb. Temp.	125°C
Carbowax™ 1000	40°C	200°C
Carbowax™ 1500	40°C	200°C
Carbowax™ 1540	40°C	200°C
Carbowax™ 4000	60°C	200°C
Carbowax™ 6000	60°C	200°C
Carbowax™ 20M	60°C	220°C
SE-30	50°C	300°C
SE-52	50°C	300°C
SE-54	100°C	300°C
Neo-pentylglycol adipate LAC 9R 769	50°C	220°C
Neo-pentylglycol sebacate LAC 17R 770	50°C	220°C
Neo-pentylglycol succinate LAC 18R 767	50°C	220°C

## Stationary Phases

Description	Min Temp	Max Temp
Silicone Oil 200 (methyl)	Amb. Temp.	225°C
Silicone Oil 550 (phenyl-methyl)	Amb. Temp.	225°C
Silicone Oil 550 + 5% Stearic Acid	Amb. Temp.	175°C
Silicone Oil 702 (phenyl-methyl)	Amb. Temp.	200°C
Silicone Oil 710 (phenyl-methyl)	Amb. Temp.	200°C
Silicone Oil F 60 (methyl para chlorophenylsiloxane)	Amb. Temp.	300°C
Silicone Oil QF 1	Amb. Temp.	250°C
Vaseline Oil - low viscosity	Amb. Temp.	40°C
Vaseline Oil - high viscosity	Amb. Temp.	75°C
Solid Paraffin PF 50°C	50°C	200°C
Polyphenyl ether (5 rings)	50°C	200°C
Polyphenyl ether (6 rings)	50°C	250°C
Polypropyleneglycol UCON-LB 550X	Amb. Temp.	200°C
Propylene Carbonate	Amb. Temp.	50°C
Poly-S 179	200°C	400°C
Reoplex 400 (Polypropyleneglycol adipate)	Amb. Temp.	220°C
OV™-1	100°C	350°C
OV™-3	0°C	350°C
OV™-7	Amb. Temp.	350°C
OV™-11	Amb. Temp.	350°C
OV™-17	0°C	350°C
OV™-101	0°C	350°C
OV™-210	Amb. Temp.	300°C
OV™-225	Amb. Temp.	275°C
OV™-275	25°C	250°C
OV™-73	0°C	350°C
SP 400	Amb. Temp.	350°C
SP 1000	Amb. Temp.	275°C
SP 2100	0°C	350°C
SP 2250	0°C	375°C
SP 2300	0°C	275°C
SP 2310	0°C	275°C
SP 2330	0°C	275°C
SP 2340	35°C	275°C
SP 2401	0°C	275°C
Squalane	Amb. Temp.	140°C
Squalene	Amb. Temp.	140°C
STAP	100°C	225°C
Tetraethylenglycol dimethylether	Amb. Temp.	80°C
Tetraethylpentamine	Amb. Temp.	150°C
Tetraisobutylene	Amb. Temp.	35°C
Tricresolphosphate	20°C	125°C
Triethanolamine	Amb. Temp.	75°C
Versamide 900 Polyamidic Resin	190°C	275°C



## Supports

## Supports

Description	Mesh	Treatment
Chromosorb® A	20/30	
Chromosorb® A	45/60	
Chromosorb® A	60/80	
Chromosorb® P	45/60	
Chromosorb® P	60/80	
Chromosorb® P	80/100	
Chromosorb® P	100/120	
Chromosorb® P	45/60	Acid Washed
Chromosorb® P	60/80	Acid Washed
Chromosorb® P	80/100	Acid Washed
Chromosorb® P	100/120	Acid Washed
Chromosorb® P	45/60	Silanized
Chromosorb® P	60/80	Silanized
Chromosorb® P	80/100	Silanized
Chromosorb® P	100/120	Silanized
Chromosorb® W	45/60	
Chromosorb® W	60/80	
Chromosorb® W	80/100	
Chromosorb® W	100/120	
Chromosorb® W	120/140	
Chromosorb® W	45/60	Acid Washed
Chromosorb® W	60/80	Acid Washed
Chromosorb® W	80/100	Acid Washed
Chromosorb® W	100/120	Acid Washed
Chromosorb® W	120/140	Acid Washed
Chromosorb® W-LA	45/60	Silanized
Chromosorb® W-LA	60/80	Silanized
Chromosorb® W-LA	80/100	Silanized
Chromosorb® W-LA	100/120	Silanized
Chromosorb® W-LA	120/140	Silanized
Chromosorb® G	45/60	
Chromosorb® G	60/80	
Chromosorb® G	80/100	
Chromosorb® G	100/120	
Chromosorb® G	120/140	

## Supports

Description	Mesh	Treatment
Chromosorb® G	45/60	Acid Washed
Chromosorb® G	60/80	Acid Washed
Chromosorb® G	80/100	Acid Washed
Chromosorb® G	100/120	Acid Washed
Chromosorb® G	120/140	Acid Washed
Chromosorb® G-LA	45/60	Silanized
Chromosorb® G-LA	60/80	Silanized
Chromosorb® G-LA	80/100	Silanized
Chromosorb® G-LA	100/120	Silanized
Chromosorb® G-LA	120/140	Silanized
Chromosorb® W HP	80/100	
Chromosorb® W HP	100/120	
Chromosorb® R-6470-1		
Chromosorb® T (teflon)	30/60	
Chromosorb® T (teflon)	40/60	
Chromosorb® 750	80/100	
Chromosorb® 750	100/120	



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**GLASS LINERS**

Description	Set of	Code
Glass Liner for SL/IN Injector complete <i>Liner in vetro per iniettore SL/IN completo</i>	5 pieces 5 pezzi	9291.100 003 MASTER GC - GC1000 - GC8610
Glass Liner for SL/IN Injector complete - SPME <i>Liner in vetro per iniettore SL/IN completo - SPME</i>	5 pieces 5 pezzi	9291.200 001 MASTER GC - GC1000 - GC8610
Glass Liner for PTV 38 Injector complete <i>Liner per iniettore PTV 38 completo</i>	5 pieces 5 pezzi	9291.100 002 MASTER GC - GC1000 - GC8610
Glass Liner for PTV 38 Injector complete <i>Liner per iniettore PTV 38 completo</i>	10 pieces 10 pezzi	9291.409 501 MASTER GC - GC1000 - GC8610
Glass Liner for PTV 38 Injector complete filled with GRAPHTRAP-GB <i>Liner per iniettore PTV 38 completo riempito GRAPHTRAP-GB</i>	1 piece 1 pezzo	9291.409 005 MASTER GC - GC1000 - GC8610
Glass Liner for PTV 38 Injector complete filled with TENAX TA <i>Liner per iniettore PTV 38 completo riempito TENAX TA</i>	1 piece 1 pezzo	9291.409 004 MASTER GC - GC1000 - GC8610
Glass Liner W-Mega-Bore for PK Injector <i>Liner W-Mega-Bore per iniettore IN 68/06</i>	5 pieces 5 pezzi	9291.100 001 MASTER GC - GC1000 - GC8610



9291.100 003	9291.100 002	9291.100 001
9291.200 001	9291.409 501	

**INJECTORS SEPTA**

Description	Set of	Code
Septa SIL 12x4 <i>Setto SIL 12x4</i>	50 pieces 50 pezzi	2308.506 950 MASTER GC - GC1000 - GC8610
Septum Holder 12S (short) <i>Portasetto 12S (corto)</i>	1 piece 1 pezzo	2308.505 010 MASTER GC - GC1000 - GC8610
Septum Holder for MASTER AS <i>Portasetto per MASTER AS</i>	1 piece 1 pezzo	6405.000 400 MASTER GC
Septum Holder 12L (long) <i>Portasetto 12L (lungo)</i>	1 piece 1 pezzo	2308.505 020 MASTER GC - GC1000 - GC8610
Adapter for Agilent Injectors <i>Adattatore per Iniettori Agilent</i>	1 piece 1 pezzo	6410.090 050 6890 - 6850 - 6820 - 5890
Adapter for Varian and Thermo Injectors <i>Adattatore per Iniettori Varian e ThermoFinnigan</i>	1 piece 1 pezzo	6410.150 001 3800 - 3900 - TRACE - FOCUS
Adapter for Shimadzu Injectors <i>Adattatore per Iniettori Shimadzu</i>	1 piece 1 pezzo	6410.218 001 2010 - 2014



## COLUMNS INSTALLATION KIT

Description	Set of	Code
Installation Kit Packed columns SS o.d. 4 mm <i>Kit Installazione Colonne impaccate Acciaio o.d. 4 mm</i>	2 pieces 2 pezzi	2300.595 005 MASTER GC - GC1000 - GC8610
Installation Kit Packed columns SS o.d. 6 mm <i>Kit Installazione Colonne impaccate Acciaio o.d. 6 mm</i>	2 pieces 2 pezzi	2300.595 006 MASTER GC - GC1000 - GC8610
Installation Kit Packed columns SS o.d. 1/8" <i>Kit Installazione Colonne Impaccate Acciaio o.d. 1/8"</i>	1 piece 1 pezzo	9440.000 001 MASTER GC - GC1000 - GC8610
Installation Kit Packed columns Glass o.d. 6 mm <i>Kit Installazione Colonne impaccate Vetro o.d. 6 mm</i>	2 pieces 2 pezzi	2300.595 007 MASTER GC - GC1000 - GC8610
Ferrule GR D6 for Glass Packed columns o.d. 6 mm (2 required) <i>Tenute GR D6 per colonne impaccate in vetro o.d. 6 mm</i>	1 piece 1 pezzo	2306.400 442 MASTER GC - GC1000 - GC8610
Installation Kit capillary columns <i>Kit Installazione Colonne Capillari</i>	1 piece 1 pezzo	9450.000 001 MASTER GC - GC1000 - GC8610

## REDUCERS

Description	Set of	Code
Reducer M 1/8"SW - M 6 MB BR <i>Riduzione M 1/8"SW - M 6 MB BR</i>	5 pieces 5 pezzi	2303.124 001
Reducer F 1/4G - M 1/8"SW SS <i>Riduzione F 1/4G - M 1/8"SW SS</i>	5 pieces 5 pezzi	2303.124 002
Reducer M 5M F 5M <i>Riduzione M 5M F 5M</i>	10 pieces 10 pezzi	2308.610 950
Reducer M 5M F 6MB BR <i>Riduzione M 5M F 6MB BR</i>	10 pieces 10 pezzi	2303.095 001
Reducer M 6MB F 5M BR <i>Riduzione M 6MB F 5M BR</i>	10 pieces 10 pezzi	2303.095 002
Reducer M 1/8"x 1/16" - M6x0,75 F <i>Riduzione M 1/8"x 1/16" - M6x0,75 F</i>	1 piece 1 pezzo	2400.300 102



2303.124 001    2303.124 002    2308.610 950    2303.095 001    2303.095 002



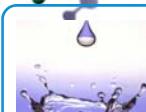
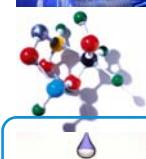
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2180.300 006    2180.300 005

## WASHERS



2180.095 021    2180.095 024    2180.300 007

Description	Set of	Code
Washer 1.1x3x0.5 BR <i>Rondella Piana 1.1x3x0.5 BR</i>	10 pieces 10 pezzi	2180.095 002
Washer 1.1x3x0.5 BR <i>Rondella Piana 1.1x3x0.5 BR</i>	50 pieces 50 pezzi	2180.300 006
Washer 6.25x11x2 BR <i>Rondella Piana 6.25x11x2 BR</i>	20 pieces 20 pezzi	2180.095 003
Washer 6.25x11x2 BR <i>Rondella Piana 6.25x11x2 BR</i>	50 pieces 50 pezzi	2180.300 005
Washer 1.25x6x1 SS <i>Rondella Piana 1.25x6x1 SS</i>	10 pieces 10 pezzi	2180.095 011
Washer 2x4.5x1.2 SS <i>Rondella Piana 2x4.5x1.2 SS</i>	10 pieces 10 pezzi	2180.095 012
Washer 4.5x8.25x1 AL <i>Rondella Piana 4.5x8.25x1 AL</i>	20 pieces 20 pezzi	2180.095 006
Washer 6.1x8x0.5 AL <i>Rondella Piana 6.1x8x0.5 AL</i>	10 pieces 10 pezzi	2180.095 010
Washer 1x6x2 GR <i>Rondella Piana 1x6x2 GR</i>	10 pieces 10 pezzi	2180.095 021
Washer 8x18x0.2 GR <i>Rondella Piana 8x18x0.2 GR</i>	10 pieces 10 pezzi	2180.095 024
Washer 10.5x16x1.5 BR <i>Rondella Piana 10.5x16x1.5 BR</i>	10 pieces 10 pezzi	2180.300 007

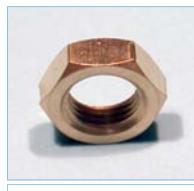




2300.095 008 | 2300.095 009 | 2300.595 008 | 2300.095 010



2300.495 001 | 2300.495 003 | 2300.495 004 | 2300.595 004



2160.095 004

## NUTS

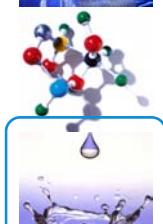
Description	Set of	Code
Nut F 4M SS <i>Bloccaggio F 4M SS</i>	10 pieces 10 pezzi	2300.095 012
Nut F 4M SS <i>Bloccaggio F 4M SS</i>	20 pieces 20 pezzi	2300.100 003
Nut M 4M SS <i>Bloccaggio M 4M SS</i>	10 pieces 10 pezzi	2300.095 001
Nut F 1/8" SW F SS <i>Bloccaggio F 1/8" SW F SS</i>	10 pieces 10 pezzi	2300.495 002
Nut F 1/8" SW F SS <i>Bloccaggio F 1/8" SW F SS</i>	20 pieces 20 pezzi	2300.100 001
Nut F 1/4G BR <i>Bloccaggio F 1/4G BR</i>	20 pieces 20 pezzi	2300.095 011
Nut, hand F 1/4G BR <i>Bloccaggio a mano F 1/4G BR</i>	10 pieces 10 pezzi	2300.395 001
Nut, hand F 1/4G BR <i>Bloccaggio a mano F 1/4G BR</i>	20 pieces 20 pezzi	2300.100 002
Nut M 5M BR <i>Bloccaggio M 5M BR</i>	20 pieces 20 pezzi	2300.095 002
Nut M 5M SS <i>Bloccaggio M 5M SS</i>	20 pieces 20 pezzi	2300.095 003
Nut M 6MB BR <i>Bloccaggio M 6MB BR</i>	20 pieces 20 pezzi	2300.095 004
Nut M 6MB SS <i>Bloccaggio M 6MB SS</i>	20 pieces 20 pezzi	2300.095 005
Nut F 10Mx1 BR <i>Bloccaggio F 10Mx1 BR</i>	10 pieces 10 pezzi	2300.095 008
Nut F 10Mx1 SS <i>Bloccaggio F 10Mx1 SS</i>	10 pieces 10 pezzi	2300.095 009
Nut F 5M SS D1 <i>Bloccaggio F 5M SS D1</i>	10 pieces 10 pezzi	2300.095 006
Nut F 8M SS <i>Bloccaggio F 8M SS</i>	20 pieces 20 pezzi	2300.595 008
Nut F 12M SS <i>Bloccaggio F 12M SS</i>	10 pieces 10 pezzi	2300.095 010
Nut SW F 1/8 BR <i>Bloccaggio SW F 1/8 BR</i>	10 pieces 10 pezzi	2300.495 001
Nut SW F 1/4 BR <i>Bloccaggio SW F 1/4 BR</i>	10 pieces 10 pezzi	2300.495 003
Nut F 1/4" SW F SS <i>Bloccaggio F 1/4" SW F SS</i>	10 pieces 10 pezzi	2300.495 004
Nut M 8MB SS <i>Bloccaggio M 8MB SS</i>	20 pieces 20 pezzi	2300.595 004
Hex Nut M 10 x 1 S 5 CH 14 BR <i>Dado M 10 x 1 S 5 CH 14 BR</i>	10 pieces 10 pezzi	2160.095 003
Hex Nut M12x1 S 5 CH 14 BR <i>Dado M12x1 S 5 CH 14 BR</i>	10 pieces 10 pezzi	2160.095 004



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2300.100 003 | 2300.100 001 | 2300.100 002

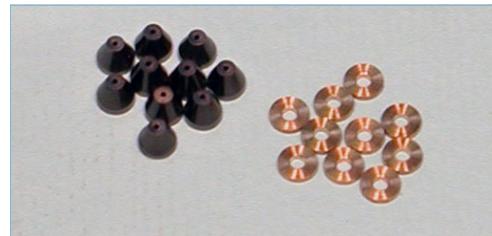


2300.095 001 | 2300.095 002 | 2300.095 003 | 2300.095 004 | 2300.095 005



## FERRULES

Description	Set of	Code
Ferrule 4M VGR for columns ID 0.25 mm with washer <i>Tenuta 4M VGR colonne ID 0.25 mm con rondella</i>	10 pieces 10 pezzi	2306.095 019
Ferrule 4M VGR for columns ID 0.32 mm with washer <i>Tenuta 4M VGR colonne ID 0.32 mm con rondella</i>	10 pieces 10 pezzi	2306.095 020
Ferrule 4M VGR for columns ID 0.53 mm with washer <i>Tenuta 4M VGR colonne ID 0.53 mm con rondella</i>	10 pieces 10 pezzi	2306.095 021
Ferrule 1x3x2 GR <i>Tenuta 1x3x2 GR</i>	50 pieces 50 pezzi	2180.095 020
Ferrule 5M D1 SS <i>Tenuta 5M D1 SS</i>	10 pieces 10 pezzi	2306.095 006
Ferrule 5M D 1.6 AL <i>Tenuta 5M D 1.6 AL</i>	50 pieces 50 pezzi	2306.095 009
Ferrule 5M D 1.6 SS <i>Tenuta 5M D 1.6 SS</i>	10 pieces 10 pezzi	2306.095 008
Ferrule 5M D 1.6 SS <i>Tenuta 5M D 1.6 SS</i>	50 pieces 50 pezzi	2306.032 282
Ferrule 6MB D 1.6 AL <i>Tenuta 6MB D 1.6 AL</i>	50 pieces 50 pezzi	2306.095 011
Ferrule 6MB D 2.0 AL <i>Tenuta 6MB D 2.0 AL</i>	50 pieces 50 pezzi	2306.095 013
Ferrule 6MB D 1.6 SS <i>Tenuta 6MB D 1.6 SS</i>	20 pieces 20 pezzi	2306.295 001
Ferrule BF 1/4G D 4 BR <i>Tenuta BF 1/4G D 4 BR</i>	20 pieces 20 pezzi	2306.295 003
Ferrule BF 1/4G D 6 BR <i>Tenuta BF 1/4G D 6 BR</i>	20 pieces 20 pezzi	2306.295 004
Ferrule BF 1/8"SW D 1/8" BR <i>Tenuta BF 1/8"SW D 1/8" BR</i>	10 pieces 10 pezzi	2306.395 001
Ferrule BF 1/8"SW D 1/8" BR <i>Tenuta BF 1/8"SW D 1/8" BR</i>	20 pieces 20 pezzi	2306.395 002
Ferrule BF 1/4 SW D1/4 SS <i>Tenuta BF 1/4 SW D1/4 SS</i>	10 pieces 10 pezzi	2306.395 004
Ferrule 6x11x1.5 AL <i>Tenuta 6x11x1.5 AL</i>	20 pieces 20 pezzi	2180.095 008
Ferrule 10M D4 SS <i>Tenuta 10M D4 SS</i>	10 pieces 10 pezzi	2306.095 015
Ferrule 2.0x6.0x2.0 GR for SPT 37.50 trap upper side <i>Tenuta 2.0x6.0x2.0 GR per lato superiore trappola</i>	10 pieces 10 pezzi	2180.095 022
Ferrule 4M D1 VGR with washer <i>Tenuta 4M D1 VGR con rondella</i>	10 pieces 10 pezzi	2306.095 022
Ferrule 5M D1 VGR for STD 33.50 trap <i>Tenuta 5M D1 VGR per trappola STD 33.50</i>	1 piece 1 pezzo	2306.032 400
Ferrule + Ring D4 GR <i>Tenuta + Anello D4 GR</i>	5 pieces 5 pezzi	2306.495 001
Ferrule D6 GR <i>Tenuta D6 GR</i>	5 pieces 5 pezzi	2306.495 002



2306.095 019  
2306.095 020  
2306.095 021  
2306.095 022



2180.095 020  
2180.095 022  
2180.095 008



2306.095 006  
2306.095 009  
2306.095 011  
2306.095 013  
2306.095 015  
2306.095 008  
2306.295 001  
2306.032 282



2306.395 001  
2306.395 004  
2306.295 003  
2306.395 002



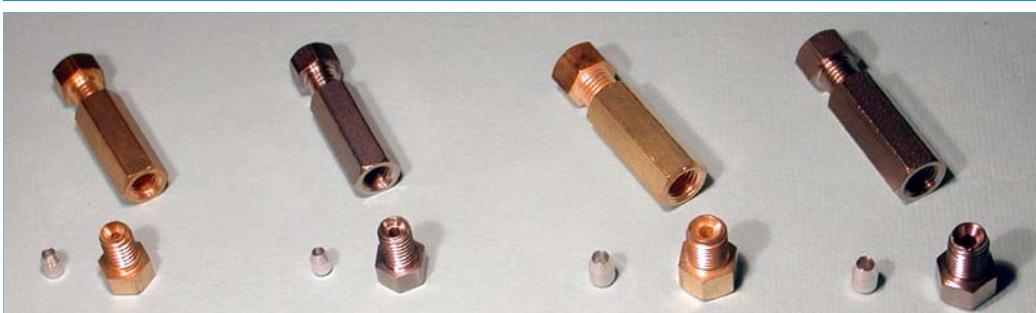
## O-RING SEAL

Description	Set of	Code	
O-ring Seal 2-001 Viton	10 pieces	2290.330 101	SPT 37.50
<i>O-ring Seal 2-001 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2056 Viton	10 pieces	2290.349 514	
<i>O-ring Seal 2056 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2015 SR	10 pieces	2290.339 508	
<i>O-ring Seal 2015 SR</i>	<i>10 pezzi</i>		
O-ring Seal 2021 SR	10 pieces	2290.339 510	
<i>O-ring Seal 2021 SR</i>	<i>10 pezzi</i>		
O-ring Seal 2200 SR	10 pieces	2290.339 518	
<i>O-ring Seal 2200 SR</i>	<i>10 pezzi</i>		
O-ring Seal 3206 SR	10 pieces	2290.339 527	
<i>O-ring Seal 3206 SR</i>	<i>10 pezzi</i>		
O-ring Seal 2007 PTFE	10 pieces	2290.369 501	
<i>O-ring Seal 2007 PTFE</i>	<i>10 pezzi</i>		
O-ring Seal SIL/PTFE D 5,5	100 pieces	2291.359 501	
<i>O-ring Seal SIL/PTFE D 5,5</i>	<i>100 pezzi</i>		
O-ring Seal 104 Viton	50 pieces	2291.349 501	
<i>O-ring Seal 104 Viton</i>	<i>50 pezzi</i>		
O-ring Seal 108 Viton	10 pieces	2290.349 501	
<i>O-ring Seal 108 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 115 Viton	10 pieces	2290.349 502	
<i>O-ring Seal 115 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 119 Viton	10 pieces	2290.349 503	
<i>O-ring Seal 119 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 147 Viton	10 pieces	2290.349 504	
<i>O-ring Seal 147 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2007 Viton	10 pieces	2290.349 505	
<i>O-ring Seal 2007 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2012 Viton	20 pieces	2290.349 506	
<i>O-ring Seal 2012 Viton</i>	<i>20 pezzi</i>		
O-ring Seal 2015 Viton	50 pieces	2290.349 507	
<i>O-ring Seal 2015 Viton</i>	<i>50 pezzi</i>		
O-ring Seal 2018 Viton	10 pieces	2290.349 508	
<i>O-ring Seal 2018 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2021 Viton	50 pieces	2290.349 509	
<i>O-ring Seal 2021 Viton</i>	<i>50 pezzi</i>		
O-ring Seal 2025 Viton	10 pieces	2290.349 510	
<i>O-ring Seal 2025 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2031 Viton	10 pieces	2290.349 511	
<i>O-ring Seal 2031 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2037 Viton	10 pieces	2290.349 512	
<i>O-ring Seal 2037 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2043 Viton	50 pieces	2290.349 513	
<i>O-ring Seal 2043 Viton</i>	<i>50 pezzi</i>		
O-ring Seal 2062 Viton	10 pieces	2290.349 515	
<i>O-ring Seal 2062 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2068 Viton	10 pieces	2290.349 516	
<i>O-ring Seal 2068 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2075 Viton	10 pieces	2290.349 517	
<i>O-ring Seal 2075 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2081 Viton	10 pieces	2290.349 518	
<i>O-ring Seal 2081 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2087 Viton	10 pieces	2290.349 519	
<i>O-ring Seal 2087 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2093 Viton	10 pieces	2290.349 520	
<i>O-ring Seal 2093 Viton</i>	<i>10 pezzi</i>		
O-ring Seal 2125 Viton	10 pieces	2290.349 521	
<i>O-ring Seal 2125 Viton</i>	<i>10 pezzi</i>		



## UNIONS

Description	Set of	Code
Union F-F 5MB D 1.6 BR complete <i>Unione F-F 5MB D 1.6 BR completa</i>	5 pieces 5 pezzi	2307.232 903
Union F-F 5MB D 1.6 SS complete <i>Unione F-F 5MB D 1.6 SS completa</i>	5 pieces 5 pezzi	2307.232 902
Union F-F 6MB D 2.0 BR complete <i>Unione F-F 6MB D 2.0 BR completa</i>	5 pieces 5 pezzi	2307.233 950
Union F-F 6MB D 2.0 SS complete <i>Unione F-F 6MB D 2.0 SS completa</i>	5 pieces 5 pezzi	2307.233 951
Union F-F 5MB BR <i>Unione F-F 5MB BR</i>	5 pieces 5 pezzi	2302.500 001
Union F-F 5MB SS <i>Unione F-F 5MB SS</i>	5 pieces 5 pezzi	2302.500 002
Union F-F 6MB BR <i>Unione F-F 6MB BR</i>	5 pieces 5 pezzi	2302.595 001
Union F-F 6MB SS <i>Unione F-F 6MB SS</i>	5 pieces 5 pezzi	2302.595 002
Bulkhead fitting 6MB - 6MB BR <i>Raccordo Paratia 6MB - 6MB BR</i>	5 pieces 5 pezzi	2308.520 001



2307.232 903

2307.232 902

2307.233 950

2307.233 951



2302.500 001

2302.500 002

2302.595 001

2302.595 002



2308.520 001

## NIPPLES

Description	Set of	Code
Nipple M 1/4 NPT M 1/4 NPT PTFE <i>Nipplo M 1/4 NPT M 1/4 NPT PTFE</i>	1 piece 1 pezzo	2302.123 360
Nipple M 1/4 NPT M 1/4 NPT SS <i>Nipplo M 1/4 NPT M 1/4 NPT SS</i>	1 piece 1 pezzo	2302.123 040
Nipple M 1/8 NPT M 1/8 NPT CPBR <i>Nipplo M 1/8 NPT M 1/8 NPT CPBR</i>	1 piece 1 pezzo	2302.124 160
Nipple M 10Mx1 M 10Mx1 SS <i>Nipplo M 10Mx1 M 10Mx1 SS</i>	1 piece 1 pezzo	2302.006 040
Nipple M 12M M 12M SS <i>Nipplo M 12M M 12M SS</i>	1 piece 1 pezzo	2302.009 040
Ogiva F 6MB BR for reducer gas cylinder <i>Ogiva F 6MB BR per riduttore Bombole</i>	1 piece 1 pezzo	2308.502 010



2302.123 360

2302.123 040

2302.124 160

2302.006 040

2302.009 040

2308.502 010



**TEES**

Description	Set of	Code
Tee union F 5M D1.6 BR complete <i>Unione a T F 5M D1.6 BR completa</i>	5 pieces 5 pezzi	2307.632 903
Tee union on F 5M D1.6 SS complete <i>Unione a T F 5M D1.6 SS completa</i>	5 pieces 5 pezzi	2307.632 902
Tee union F 6MB D2.0 BR complete <i>Unione a T F 6MB D2.0 BR completa</i>	5 pieces 5 pezzi	2307.633 903
Tee union F 6MB D2.0 SS complete <i>Unione a T F 6MB D2.0 SS completa</i>	5 pieces 5 pezzi	2307.633 902
Tee union 5M BR <i>Unione a T 5M BR</i>	5 pieces 5 pezzi	2308.520 006
Tee union 5M SS <i>Unione a T 5M SS</i>	5 pieces 5 pezzi	2308.520 007
Tee union 6MB BR <i>Unione a T 6MB BR</i>	5 pieces 5 pezzi	2304.595 001
Tee union 6MB SS <i>Unione a T 6MB SS</i>	5 pieces 5 pezzi	2308.520 005
Tee union 1/8" SW SS 316 <i>Unione a T 1/8" SW SS 316</i>	1 piece 1 pezzo	2400.300 103

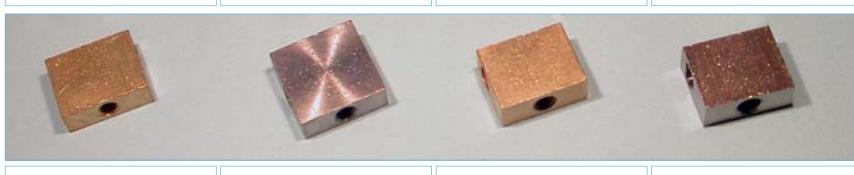


2307.632 903

2307.632 902

2307.633 903

2307.633 902



2308.520 006

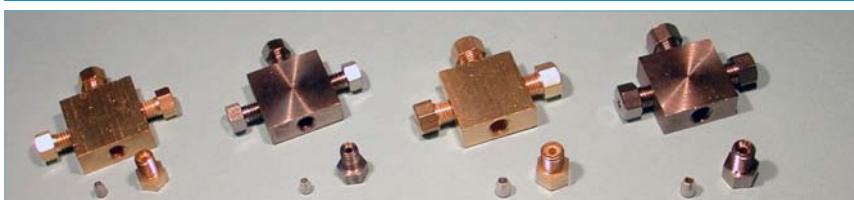
2308.520 007

2304.595 001

2308.520 005

**CROSSES**

Description	Set of	Code
Cross union F 5M D1.6 BR complete <i>Unione a croce F 5M D1.6 BR completa</i>	5 pieces 5 pezzi	2307.732 903
Cross union F 5M D1.6 SS complete <i>Unione a croce F 5M D1.6 SS completa</i>	5 pieces 5 pezzi	2307.732 902
Cross union F 6MB D2.0 BR complete <i>Unione a croce F 6MB D2.0 BR completa</i>	5 pieces 5 pezzi	2307.733 903
Cross union F 6MB D2.0 SS complete <i>Unione a croce F 6MB D2.0 SS completa</i>	5 pieces 5 pezzi	2307.733 902
Cross union 5M BR <i>Unione a Croce 5M BR</i>	5 pieces 5 pezzi	2308.520 002
Cross union 5M SS <i>Unione a Croce 5M SS</i>	5 pieces 5 pezzi	2308.520 004
Cross union 6MB BR <i>Unione a Croce 6MB BR</i>	5 pieces 5 pezzi	2305.095 001
Cross union 6MB SS <i>Unione a Croce 6MB SS</i>	5 pieces 5 pezzi	2308.520 003
Cross union 1/8" SW SS 316 <i>Unione a Croce 1/8" SW SS 316</i>	1 piece 1 pezzo	2400.300 104



2307.732 903

2307.732 902

2307.733 903

2307.733 902



2308.520 002

2308.520 004

2305.095 001

2308.520 003

## PLUGS

Description	Set of	Code
Plug M 5M BR <i>Tappo M 5M BR</i>	10 pieces <i>10 pezzi</i>	2301.195 001
Plug M 5M BR <i>Tappo M 5M BR</i>	20 pieces <i>20 pezzi</i>	2301.102 042
Plug M 5M SS <i>Tappo M 5M SS</i>	10 pieces <i>10 pezzi</i>	2301.195 002
Plug M 5M SS <i>Tappo M 5M SS</i>	20 pieces <i>20 pezzi</i>	2301.102 041
Plug M 6MB BR <i>Tappo M 6MB BR</i>	10 pieces <i>10 pezzi</i>	2301.195 003
Plug M 6MB BR <i>Tappo M 6MB BR</i>	20 pieces <i>20 pezzi</i>	2301.195 006
Plug M 6MB SS <i>Tappo M 6MB SS</i>	10 pieces <i>10 pezzi</i>	2301.195 004
Plug M 6MB SS <i>Tappo M 6MB SS</i>	20 pieces <i>20 pezzi</i>	2301.195 005
Plug F 6MB <i>Bloccaggio cieco F 6MB</i>	5 pieces <i>5 pezzi</i>	2300.295 001
Plug F 10Mx1 SS <i>Bloccaggio cieco F 10Mx1 SS</i>	5 pieces <i>5 pezzi</i>	2300.295 002
Plug 1/8" SW BR <i>Tappo 1/8" SW BR</i>	1 piece <i>1 pezzo</i>	2308.601 904



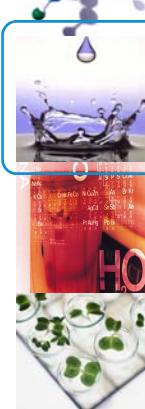
## MICRO FILTERS

Description	Set of	Code
Micro Filter MF 396 <i>Micro Filtro MF 396</i>	1 piece <i>1 pezzo</i>	1050.509 008



## AIR PUMP CRYOFOCUSING TRAP for SPT 37.50

Description	Set of	Code
Filter TFE replacement <i>Ricambio Filtro TFE</i>	1 piece <i>1 pezzo</i>	1050.600 016 SPT 37.50



## SAMPLING VALVES with actuator

Description	Set of	Code
Manual External SS 6 ways with 1 ml loop Stainless Steel <i>Manuale Esterna 6 vie completa di loop 1 ml Stainless Steel</i>	1 piece 1 pezzo	0305.200 001    MASTER GC - GC1000 - GC8610
Automatic external 6 ways Stainless Steel <i>Automatica Esterna 6 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 002    GC1000 - GC8610
Automatic external 6 ways Stainless Steel <i>Automatica Esterna 6 vie Stainless Steel</i>	1 piece 1 pezzo	0305.300 002    MASTER GC
Automatic external 8 ways Stainless Steel <i>Automatica Esterna 8 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 003    GC1000 - GC8610
Automatic external 8 ways Stainless Steel <i>Automatica Esterna 8 vie Stainless Steel</i>	1 piece 1 pezzo	0305.300 003    MASTER GC
Automatic external 8 ways MONEL 400 <i>Automatica Esterna 8 vie MONEL 400</i>	1 piece 1 pezzo	0305.200 015    GC1000 - GC8610
Automatic external 8 ways MONEL 400 <i>Automatica Esterna 8 vie MONEL 400</i>	1 piece 1 pezzo	0305.300 015    MASTER GC
Automatic external 10 ways Stainless Steel <i>Automatica Esterna 10 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 004    GC1000 - GC8610
Automatic external 10 ways Stainless Steel <i>Automatica Esterna 10 vie Stainless Steel</i>	1 piece 1 pezzo	0305.300 004    MASTER GC
Automatic external 10 ways MONEL 400 <i>Automatica Esterna 10 vie MONEL 400</i>	1 piece 1 pezzo	0305.200 017    GC1000 - GC8610
Automatic external 10 ways MONEL 400 <i>Automatica Esterna 10 vie MONEL 400</i>	1 piece 1 pezzo	0305.300 017    MASTER GC
Automatic internal 6 ways Stainless Steel <i>Automatica Interna 6 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 005    MASTER GC - GC1000 - GC8610
Automatic internal 8 ways Stainless Steel <i>Automatica Interna 8 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 006    MASTER GC - GC1000 - GC8610
Automatic internal 10 ways Stainless Steel <i>Automatica Interna 10 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 007    MASTER GC - GC1000 - GC8610
Automatic internal 10 ways MONEL 400 <i>Automatica Interna 10 vie MONEL 400</i>	1 piece 1 pezzo	0305.200 010    MASTER GC - GC1000 - GC8610

## SWITCHING VALVES with actuator

Description	Set of	Code
Automatic external 6 ways Stainless Steel <i>Automatica Esterna 6 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 008    GC1000 - GC8610
Automatic external 6 ways Stainless Steel <i>Automatica Esterna 6 vie Stainless Steel</i>	1 piece 1 pezzo	0305.300 008    MASTER GC
Automatic external 8 ways Stainless Steel <i>Automatica Esterna 8 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 009    GC1000 - GC8610
Automatic external 8 ways Stainless Steel <i>Automatica Esterna 8 vie Stainless Steel</i>	1 piece 1 pezzo	0305.300 009    MASTER GC
Automatic internal 6 ways Stainless Steel <i>Automatica Interna 6 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 011    MASTER GC - GC1000 - GC8610
Automatic internal 6 ways MONEL 400 <i>Automatica Interna 6 vie MONEL 400</i>	1 piece 1 pezzo	0305.200 013    MASTER GC - GC1000 - GC8610
Automatic internal 8 ways Stainless Steel <i>Automatica Interna 8 vie Stainless Steel</i>	1 piece 1 pezzo	0305.200 012    MASTER GC - GC1000 - GC8610
Automatic internal 8 ways MONEL 400 <i>Automatica Interna 8 vie MONEL 400</i>	1 piece 1 pezzo	0305.200 016    MASTER GC - GC1000 - GC8610



## MICROFLOW VALVES

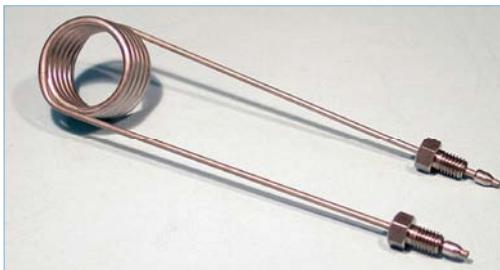
Description	Set of	Code
Microflow Valve <i>Valvola micoregolazione flusso</i>	1 piece 1 pezzo	9040.500 001



9040.500 001

**SAMPLING LOOPS**

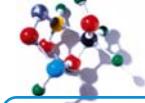
Description	Set of	Code	
Sampling Loop 5 microliter	1 piece 1 pezzo	2320.200 001	MASTER GC - GC1000 - GC8610
Sampling Loop 10 microliter	1 piece 1 pezzo	2320.200 002	MASTER GC - GC1000 - GC8610
Sampling Loop 20 microliter	1 piece 1 pezzo	2320.200 003	MASTER GC - GC1000 - GC8610
Sampling Loop 50 microliter	1 piece 1 pezzo	2320.200 004	MASTER GC - GC1000 - GC8610
Sampling Loop 100 microliter	1 piece 1 pezzo	2320.200 005	MASTER GC - GC1000 - GC8610
Sampling Loop 250 microliter	1 piece 1 pezzo	2320.200 006	MASTER GC - GC1000 - GC8610
Sampling Loop 500 microliter	1 piece 1 pezzo	2320.300 001	MASTER GC - GC1000 - GC8610
Sampling Loop 500 microliter MONEL 400	1 piece 1 pezzo	2320.300 011	MASTER GC - GC1000 - GC8610
Sampling Loop 1 ml	1 piece 1 pezzo	2320.300 009	MASTER GC - GC1000 - GC8610
Sampling Loop 1 ml MONEL 400	1 piece 1 pezzo	2320.300 010	MASTER GC - GC1000 - GC8610
Sampling Loop 1.5 ml	1 piece 1 pezzo	2320.300 002	MASTER GC - GC1000 - GC8610
Sampling Loop 2 ml	1 piece 1 pezzo	2320.300 007	MASTER GC - GC1000 - GC8610
Sampling Loop 3 ml	1 piece 1 pezzo	2320.300 003	MASTER GC - GC1000 - GC8610
Sampling Loop 5 ml	1 piece 1 pezzo	2320.300 004	MASTER GC - GC1000 - GC8610
Sampling Loop 10 ml	1 piece 1 pezzo	2320.300 005	MASTER GC - GC1000 - GC8610
Sampling Loop 25 ml	1 piece 1 pezzo	2320.300 006	MASTER GC - GC1000 - GC8610
Sampling Loop - 0.25 ml	1 piece 1 pezzo	2321.690 011	HSS 86.50 - HSS1000
Sampling Loop - 0.50 ml	1 piece 1 pezzo	2321.690 012	HSS 86.50 - HSS1000
Sampling Loop - 1 ml	1 piece 1 pezzo	2321.690 004	HSS 86.50 - HSS1000
Sampling Loop - 2 ml	1 piece 1 pezzo	2321.690 013	HSS 86.50 - HSS1000
Sampling Loop - 3 ml	1 piece 1 pezzo	2321.690 008	HSS 86.50 - HSS1000



2320.200 001	2320.300 009
2320.200 002	2320.300 010
2320.200 003	2320.300 002
2320.200 004	2320.300 007
2320.200 005	2320.300 003
2320.200 006	2320.300 004
2320.300 001	2320.300 005
2320.300 011	2320.300 006



2321.690 011
2321.690 012
2321.690 004
2321.690 013
2321.690 008



## ACCESORIES for INJECTORS

Description	Set of	Code
Internal fitting for injector SL/IN 85/2 <i>Ghiera Interna per Iniettore SL/IN 85/2</i>	1 piece <i>1 pezzo</i>	9291.502 001 MASTER GC - GC1000 - GC8610
Internal fitting for injector SL/IN 85/2 - SPME <i>Ghiera Interna per Iniettore SL/IN 85/2 - SPME</i>	1 piece <i>1 pezzo</i>	9291.502 002 MASTER GC - GC1000 - GC8610
Spring for injector SL/IN 85/2 <i>Molla per Iniettore SL/IN 85/2</i>	1 piece <i>1 pezzo</i>	2351.500 006 MASTER GC - GC1000 - GC8610
Internal fitting for injector PTV 38 <i>Ghiera Interna per Iniettore PTV 38</i>	1 piece <i>1 pezzo</i>	9291.400 702 MASTER GC - GC1000 - GC8610
Spring for injector PTV 38 <i>Molla per Iniettore PTV 38</i>	1 piece <i>1 pezzo</i>	2351.500 005 MASTER GC - GC1000 - GC8610
Internal fitting for injector PK <i>Ghiera Interna per Iniettore PK</i>	1 piece <i>1 pezzo</i>	9291.300 901 MASTER GC - GC1000 - GC8610
Key for injector PTV 38 <i>Chiave per Iniettore PTV 38</i>	1 piece <i>1 pezzo</i>	1342.000 003 MASTER GC - GC1000 - GC8610
Key for injector SL/IN 85/2 <i>Chiave per Iniettore SL/IN 85/2</i>	1 piece <i>1 pezzo</i>	1342.000 007 MASTER GC - GC1000 - GC8610



9291.502 001

9291.502 002

2351.500 006

9291.400 702

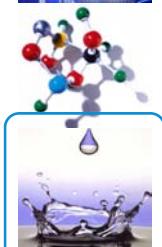
2351.500 005

9291.300 901



1342.000 003

1342.000 007



## GAS PURIFIERS

Description	Set of	Code
Moisture trap with 6MB fittings <i>Trappola per Umidità completa di raccordi 6MB</i>	1 piece <i>1 pezzo</i>	9380.300 002
Moisture trap 1/8" fittings <i>Trappola per Umidità raccordi 1/8"</i>	1 piece <i>1 pezzo</i>	1050.500 017
Oxygen trap with 6MB fittings <i>Trappola per Ossigeno completa di raccordi 6MB</i>	1 piece <i>1 pezzo</i>	9380.300 001
Oxygen trap 1/8" fittings <i>Trappola per Ossigeno raccordi 1/8"</i>	1 piece <i>1 pezzo</i>	1050.500 018
Hydrocarbons trap with 6MB fittings <i>Trappola per Idrocarburi completa di raccordi 6MB</i>	1 piece <i>1 pezzo</i>	9380.300 003
Hydrocarbons trap 1/8" fittings <i>Trappola per Idrocarburi raccordi 1/8"</i>	1 piece <i>1 pezzo</i>	1050.500 019
Moisture trap Hydropurge 1/8" fittings <i>Trappola per Umidità Hydropurge raccordi 1/8"</i>	1 piece <i>1 pezzo</i>	1050.500 016
Moisture trap Hydropurge II 200cc 1/8" fittings <i>Trappola per Umidità Hydropurge II 200cc raccordi 1/8"</i>	1 piece <i>1 pezzo</i>	1050.500 020

## ACCESSORIES for DETECTORS

Description	Set of	Code	
FID Nozzle <i>Ugello FID</i>	1 piece <i>1 pezzo</i>	2321.900 011	MASTER GC - GC1000 - GC8610
NPD Nozzle <i>Ugello NPD</i>	1 piece <i>1 pezzo</i>	2321.900 013	MASTER GC - GC1000 - GC8610
FPD Nozzle lower <i>Ugello FPD inferiore</i>	1 piece <i>1 pezzo</i>	2321.900 017	MASTER GC - GC1000 - GC8610
FPD Nozzle upper <i>Ugello FPD superiore</i>	1 piece <i>1 pezzo</i>	2321.900 018	MASTER GC - GC1000 - GC8610
PID Nozzle <i>Ugello PID</i>	1 piece <i>1 pezzo</i>	2321.900 021	MASTER GC - GC1000 - GC8610
FPD Sulfur Filter <i>Filtro Zolfo</i>	1 piece <i>1 pezzo</i>	3741.000 001	MASTER GC - GC1000 - GC8610
FPD Phosphorus Filter <i>Filtro Fosforo FPD</i>	1 piece <i>1 pezzo</i>	3741.000 002	MASTER GC - GC1000 - GC8610
UV Lamp HI-Energy 10.0 - 10.6 Ev <i>UV Lamp HI-Energy 10.0 - 10.6 Ev</i>	1 piece <i>1 pezzo</i>	3742.010 006	MASTER GC - GC1000 - GC8610
Flame Igniter Mod.680 FID/NPD <i>Flame Igniter Mod.680 FID/NPD</i>	1 piece <i>1 pezzo</i>	9281.309 001	MASTER GC - GC1000 - GC8610
TCD Filaments WX-2 <i>Filamenti WX-2 coppia TCD</i>	1 piece <i>1 pezzo</i>	9281.400 601	MASTER GC - GC1000 - GC8610
Rubidium Pearl NPD <i>Rubidium Pearl NPD</i>	1 piece <i>1 pezzo</i>	9281.509 003	MASTER GC - GC1000 - GC8610
Rubidium Pearl NPD - LONGLIFE <i>Rubidium Pearl NPD - LONGLIFE</i>	1 piece <i>1 pezzo</i>	9281.509 004	MASTER GC - GC1000 - GC8610



2321.900 011

2321.900 013

2321.900 017

2321.900 021



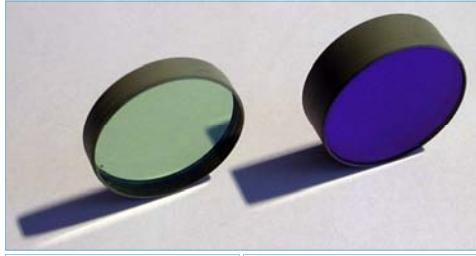
2321.900 018



3742.010 006



9281.309 001



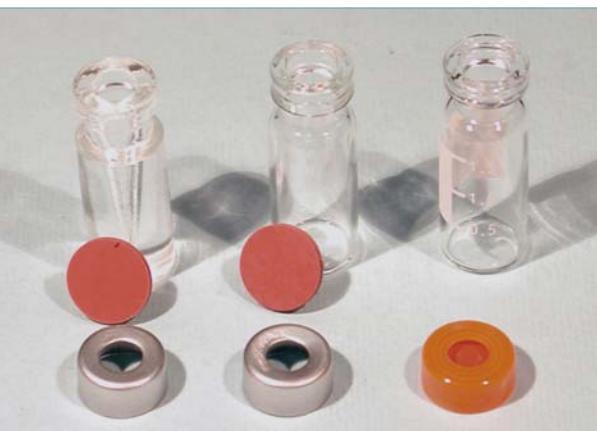
3741.000 002

3741.000 001



## VIALS for Liquid Autosamplers

Description	Set of	Code
Vial 12x32 mm - volume 100 µl Vial 12x32 mm - volume 100 µl	50 pieces 50 pezzi	1262.011 004 <i>Sample</i>
Vial 12x32 mm - volume 1,5 ml Vial 12x32 mm - volume 1,5 ml	50 pieces 50 pezzi	1262.095 002 <i>Sample</i>
Vial - volume 2 ml - snap cap + cap + septa Vial - volume 2 ml - snap cap completo di tappo e setto	100 pieces 100 pezzi	1261.000 002 <i>HT300A - HT310A</i> <i>Sample</i>
Crimp seal for Vial 12x32 mm Capsula per Vial 12x32 mm	100 pieces 100 pezzi	1260.895 001 MASTER AS - ALS1000 - HT300A - HT310A
Septa TFE/BUT for Crimp seal Setto TFE/BUT per Capsula	100 pieces 100 pezzi	1260.995 004 MASTER AS - ALS1000 - HT300A - HT310A
Septa TFE/SIL for Crimp seal Setto TFE/SIL per Capsula	100 pieces 100 pezzi	1260.905 004 MASTER AS - ALS1000 - HT300A - HT310A
Hand crimper for Crimp seal Pinza Chiudi Vials per Capsula	1 piece 1 pezzo	1343.000 006 MASTER AS - ALS1000 - HT300A - HT310A
Vial 23x50 mm - volume 10.5 ml - screw top + cap + septa TFE/SIL Vial 23x50 mm - volume 10.5 ml - chiusura a vite completo di tappo e setto TFE/SIL	5 pieces 5 pezzi	1262.017 001 <i>Solvent</i> MASTER AS - ALS1000
Vial 10 ml + cap + septa Vial 10 ml + cap + setta	4 pieces 4 pezzi	1261.000 010 <i>Solvent</i> HT300A - HT310A
Vial 23x50 mm - volume 10.5 ml - screw top + cap + septa TFE/SIL Vial 23x50 mm - volume 10.5 ml - chiusura a vite completo di tappo e setto TFE/SIL	5 pieces 5 pezzi	1262.017 001 <i>Waste</i> MASTER AS
Vial 23x46 mm - volume 10 ml + crimp seal + septa TFE/BUT Vial 23x46 mm - volume 10 ml completo di capsula e setto TFE/BUT	5 pieces 5 pezzi	1261.100 001 <i>Waste</i> ALS1000
Vial 20 ml + cap + septa Vial 20 ml + cap + setta	1 piece 1 pezzo	1261.000 020 <i>Waste</i> HT300A - HT310A
Vial 17x60 mm - volume 8 ml - screw top + cap + septa TFE/SIL Vial 17x60 mm - volume 8 ml - chiusura a vite completo di tappo e setto TFE/SIL	5 pieces 5 pezzi	1261.090 003 <i>Flush &amp; Dry</i> ALS1000



1262.011 004

1262.095 002

1261.000 002

1343.000 006

1260.995 004

1260.895 001



1262.017 001

1261.000 010

1261.100 001

1261.000 020

1261.090 003



## SYRINGES for Liquid Autosamplers

Description	Set of	Code	
Microsyringe 5 ul <i>Microsiringa 5 ul</i>	1 piece 1 pezzo	1250.400 003	MASTER AS
Microsyringe 10 ul <i>Microsiringa 10 ul</i>	1 piece 1 pezzo	1250.401 002	MASTER AS - ALS1000
Microsyringe 10 ul Flush&Dry <i>Microsiringa 10 ul per Flush&amp;Dry</i>	1 piece 1 pezzo	1250.490 001	MASTER AS - ALS1000
Microsyringe 10 ul - Long Needle <i>Microsiringa 10 ul - Long Needle</i>	1 piece 1 pezzo	1250.400 001	HT310A - HT300A
Microsyringe 25 ul <i>Microsiringa 25 ul</i>	1 piece 1 pezzo	1250.400 004	MASTER AS - HT300A - HT310A
Microsyringe 50 ul <i>Microsiringa 50 ul</i>	1 piece 1 pezzo	1250.400 005	MASTER AS - HT300A - HT310A
Microsyringe 100 ul <i>Microsiringa 100 ul</i>	1 piece 1 pezzo	1250.400 006	MASTER AS - HT300A - HT310A
Microsyringe 250 ul <i>Microsiringa 250 ul</i>	1 piece 1 pezzo	1250.400 007	MASTER AS
Microsyringe 500 ul <i>Microsiringa 500 ul</i>	1 piece 1 pezzo	1250.400 008	MASTER AS

1250.400 003

1250.490 001

1250.401 002

1250.400 004

1250.400 005

1250.400 006

1250.400 007

1250.400 008

## TRANSFER LINE NEEDLES

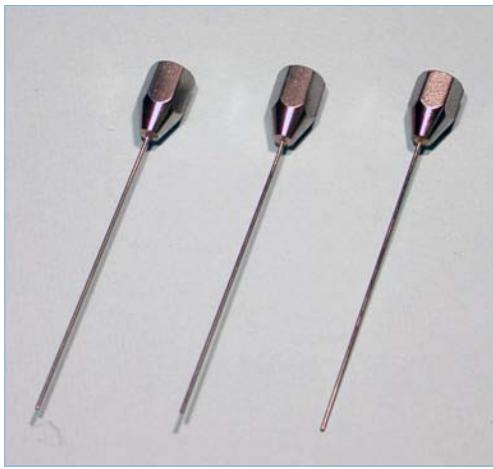
Description	Set of	Code	
Transfer Line needle - 0.7x0.4 <i>Puntale Linea di Trasferimento - 0.7x0.4</i>	2 pieces 2 pezzi	2322.590 105	HSS 86.50 - HSS1000
Transfer Line needle - 0.5x0.2 <i>Puntale Linea di Trasferimento - 0.5x0.2</i>	2 pieces 2 pezzi	2322.590 104	HSS 86.50 - HSS1000
Transfer Line needle <i>Puntale Linea di Trasferimento</i>	2 pieces 2 pezzi	2322.590 106	MASTER TD - STD1000

## NEEDLES for HSS

Description	Set of	Code	
Needle for HSS 86.50 - HSS 1000 <i>Ago per HSS 86.50 - HSS 1000</i>	2 pieces 2 pezzi	2322.790 120	HSS 86.50 - HSS1000
Key for Nozzle NZ373 <i>Chiave a Tubo 8 x Ugello NZ373</i>	1 piece 1 pezzo	1342.000 002	SPT 37.50



1250.400 001



2322.590 105

2322.590 104

2322.590 106



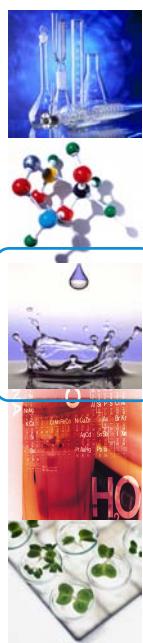
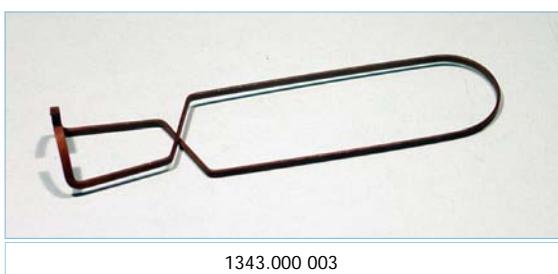
2322.790 120

1342.000 002



## HEAD SPACE VIALS

Description	Set of	Code	
Vial 23x46 – volume 10 ml – crimp top <i>Vial 23x46 – volume 10 ml – chiusura a capsula</i>	50 pieces <i>50 pezzi</i>	1262.195 001	HSS 86.50 - HSS1000
Vial 23x46 – volume 10 ml – crimp top <i>Vial 23x46 – volume 10 ml – chiusura a capsula</i>	500 pieces <i>500 pezzi</i>	1262.020 003	HSS 86.50 - HSS1000
Vial 23x75 – volume 20 ml – crimp top <i>Vial 23x75 – volume 20 ml – chiusura a capsula</i>	50 pieces <i>50 pezzi</i>	1262.195 003	HSS 86.50 - HSS1000 - SPT 37.50
Vial 23x75 – volume 20 ml – crimp top <i>Vial 23x75 – volume 20 ml – chiusura a capsula</i>	500 pieces <i>500 pezzi</i>	1262.020 002	HSS 86.50 - HSS1000 - SPT 37.50
Crimp seal AL for Vial 23x46 and 23x75 <i>Capsula AL per Vial 23x46 and 23x75</i>	100 pieces <i>100 pezzi</i>	1260.895 002	HSS 86.50 - HSS1000 - SPT 37.50
Crimp seal AL for Vial 23x46 and 23x75 <i>Capsula AL per Vial 23x46 and 23x75</i>	500 pieces <i>500 pezzi</i>	1260.820 002	HSS 86.50 - HSS1000 - SPT 37.50
Septa TFE/BUT for crimp seal cod. 1260.895 002 <i>Setto TFE/BUT per Capsula cod. 1260.895 002</i>	100 pieces <i>100 pezzi</i>	1260.995 005	HSS 86.50 - HSS1000 - SPT 37.50
Septa TFE/BUT for crimp seal cod. 1260.895 002 <i>Setto TFE/BUT per Capsula cod. 1260.895 002</i>	500 pieces <i>500 pezzi</i>	1260.920 004	HSS 86.50 - HSS1000 - SPT 37.50
Septa TFE/SIL for crimp seal cod. 1260.895 002 <i>Setto TFE/SIL per Capsula cod. 1260.895 002</i>	100 pieces <i>100 pezzi</i>	1260.995 003	HSS 86.50 - HSS1000 - SPT 37.50
Septa BUT for crimp seal cod. 1260.895 002 <i>Setto BUT per Capsula cod. 1260.895 002</i>	100 pieces <i>100 pezzi</i>	1260.995 002	HSS 86.50 - HSS1000 - SPT 37.50
Hand Crimper for crimp seal cod. 1260.895 002 <i>Pinza Chiudi Vials per Capsula cod. 1260.895 002</i>	1 piece <i>1 pezzo</i>	1343.000 007	HSS 86.50 - HSS1000 - SPT 37.50
Vials extractor for Vial 23x75 <i>Estrattore per Vial 23x75</i>	1 piece <i>1 pezzo</i>	1343.000 003	SPT 37.50
Tray adapter for Vial volume 10 ml <i>Adattatore per Vial volume 10 ml portacampioni esterno</i>	25 pieces <i>25 pezzi</i>	1269.095 001	HSS 86.50 - HSS1000
Incubation Oven adapter for Vial volume 10 ml <i>Adattatore per Vial volume 10 ml camera incubazione</i>	6 pieces <i>6 pezzi</i>	1269.100 001	HSS 86.50 - HSS1000





### THERMAL DESORPTION TUBES - 3.5" X 1/4" - Empty

Description	Set of	Code	
Empty Tube Stainless Steel 3.5" x 1/4" <i>Tubo vuoto in acciaio 3.5" x 1/4"</i>	10 pieces 10 pezzi	6310.220 041	MASTER TD - STD1000
Empty Tube Glass 3.5" x 1/4" <i>Tubo vuoto in vetro 3.5" x 1/4"</i>	10 pieces 10 pezzi	1300.110 009	MASTER TD - STD1000
Septum D4 for Glass tube <i>Setto D4 per tubo in vetro</i>	100 pieces 100 pezzi	1260.904 002	MASTER TD - STD1000
Septum D5 for Stainless Steel tube <i>Setto D5 per tubo in acciaio</i>	100 pieces 100 pezzi	1260.905 002	MASTER TD - STD1000
Cap for tube 3.5" x 1/4" <i>Tappo per tubo 3.5" x 1/4"</i>	20 pieces 20 pezzi	6310.220 049	MASTER TD - STD1000
Diffusion cap for tube 3.5" x 1/4" <i>Tappo diffusivo per tubo 3.5" x 1/4"</i>	20 pieces 20 pezzi	6310.220 052	MASTER TD - STD1000
Long Term cap with PTFE seal <i>Tappo a Lunga Tenuta completo di tenute PTFE</i>	20 pieces 20 pezzi	5281.200 002	MASTER TD - STD1000

6310.220 041	1300.110 009	1260.904 002
		5281.200 002
		1260.905 002
		6310.220 049
		6310.220 052

### THERMAL DESORPTION TUBES - 3.5" X 1/4" - Stainless Steel Packed

Description	Set of	Code	
Thermal Desorption Tube Carbotrap® 100 <i>Tubo per desorbimento termico Carbotrap® 100</i>	10 pieces 10 pezzi	1300.400 100	MASTER TD - STD1000
Thermal Desorption Tube Carbotrap® 202 <i>Tubo per desorbimento termico Carbotrap® 202</i>	10 pieces 10 pezzi	1300.400 202	MASTER TD - STD1000
Thermal Desorption Tube Carbotrap® 300 <i>Tubo per desorbimento termico Carbotrap® 300</i>	10 pieces 10 pezzi	1300.400 300	MASTER TD - STD1000
Thermal Desorption Tube Carbotrap® 349 <i>Tubo per desorbimento termico Carbotrap® 349</i>	10 pieces 10 pezzi	1300.400 349	MASTER TD - STD1000
Thermal Desorption Tube Air Toxics <i>Tubo per desorbimento termico Air Toxics</i>	10 pieces 10 pezzi	1300.401 100	MASTER TD - STD1000
Thermal Desorption Tube Carbosieve SIII <i>Tubo per desorbimento termico Carbosieve SIII</i>	10 pieces 10 pezzi	1300.401 102	MASTER TD - STD1000
Thermal Desorption Tube Tenax® GR <i>Tubo per desorbimento termico Tenax® GR</i>	10 pieces 10 pezzi	1300.401 104	MASTER TD - STD1000
Thermal Desorption Tube Tenax® TA <i>Tubo per desorbimento termico Tenax® TA</i>	10 pieces 10 pezzi	1300.401 106	MASTER TD - STD1000
Thermal Desorption Tube Chromosorb® 106 <i>Tubo per desorbimento termico Chromosorb® 106</i>	10 pieces 10 pezzi	1300.402 106	MASTER TD - STD1000
Thermal Desorption Tube Tenax® GR, Carbotrap® B, Carbosieve SIII <i>Tubo per desorbimento termico Tenax® GR, Carbotrap® B, Carbosieve SIII</i>	10 pieces 10 pezzi	1300.403 100	MASTER TD - STD1000



### THERMAL DESORPTION TUBES - 3.5" X 1/4" - Glass Packed

Description	Set of	Code	
Thermal Desorption Tube Carbotrap® 100 <i>Tubo per desorbimento termico Carbotrap® 100</i>	10 pieces 10 pezzi	1300.100 100	MASTER TD - STD1000
Thermal Desorption Tube Carbotrap® 202 <i>Tubo per desorbimento termico Carbotrap® 202</i>	10 pieces 10 pezzi	1300.100 202	MASTER TD - STD1000
Thermal Desorption Tube Carbotrap® 300 <i>Tubo per desorbimento termico Carbotrap® 300</i>	10 pieces 10 pezzi	1300.100 300	MASTER TD - STD1000
Thermal Desorption Tube Carbotrap® 349 <i>Tubo per desorbimento termico Carbotrap® 349</i>	10 pieces 10 pezzi	1300.100 349	MASTER TD - STD1000
Thermal Desorption Tube Air Toxics <i>Tubo per desorbimento termico Air Toxics</i>	10 pieces 10 pezzi	1300.101 100	MASTER TD - STD1000
Thermal Desorption Tube Carbosieve SIII <i>Tubo per desorbimento termico Carbosieve SIII</i>	10 pieces 10 pezzi	1300.101 102	MASTER TD - STD1000
Thermal Desorption Tube Tenax® GR <i>Tubo per desorbimento termico Tenax® GR</i>	10 pieces 10 pezzi	1300.101 104	MASTER TD - STD1000
Thermal Desorption Tube Tenax® TA <i>Tubo per desorbimento termico Tenax® TA</i>	10 pieces 10 pezzi	1300.101 106	MASTER TD - STD1000
Thermal Desorption Tube Chromosorb® 106 <i>Tubo per desorbimento termico Chromosorb® 106</i>	10 pieces 10 pezzi	1300.102 106	MASTER TD - STD1000



## TRAPS

Description	Set of	Code
Empty Trap <i>Trappola in quarzo vuota</i>	1 piece 1 pezzo	1270.510 002 MASTER TD - STD1000
Trap filled with Tenax® GR <i>Trappola riempita in Tenax® GR</i>	1 piece 1 pezzo	9291.409 006 MASTER TD - STD1000
Trap filled with Tenax® TA <i>Trappola riempita in Tenax® TA</i>	1 piece 1 pezzo	9291.409 008 MASTER TD - STD1000
Trap filled with Carbotrap® and Carbosieve SIII <i>Trappola doppio strato Carbotrap® - Carbosieve SIII</i>	1 piece 1 pezzo	9291.409 007 MASTER TD - STD1000
Trap filled with Tenax® GR, Carbotrap® and Carbosieve SIII <i>Trappola Triplo stato Tenax® GR, Carbotrap® - Carbosieve SIII</i>	1 piece 1 pezzo	9291.409 015 MASTER TD - STD1000
Ferrule 10M D4 PTFE for STD1000 trap <i>Tenuta 10M D4 PTFE per trappola STD1000</i>	10 pieces 10 pezzi	2306.095 016 MASTER TD - STD1000



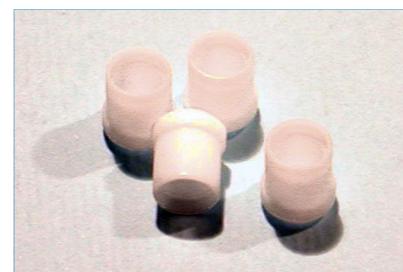
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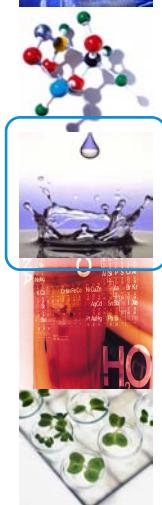
9291.409 008

9291.409 007

9291.409 015



2306.095 016



**TUBING**

Description	Set of	Code
Tube SS AISI 316 D 1.6x1 mm <i>Tubo SS AISI 316 D 1.6x1 mm</i>	5 meters <i>5 metri</i>	1300.509 505
Tube SIL 3x0.5 mm <i>Tubo Silicone naturale 3x0.5 mm</i>	1 meter <i>1 metro</i>	1303.505 001
Tube SIL 4x2 mm <i>Tubo Silicone naturale 4x2 mm</i>	1 meter <i>1 metro</i>	1303.520 001
Tube TFE 1.6x0.95 mm <i>Tubo TFE 1.6x0.95 mm</i>	1 meter <i>1 metro</i>	1303.600 001
Tube PVC 13x7 mm <i>Tubo retinato PVC 13x7 mm</i>	5 meters <i>5 metri</i>	1303.250 002
Tube SS 1.6x0.8 mm <i>Tubo SS 1.6x0.8 mm</i>	5 meters <i>5 metri</i>	1300.409 502
Tube Rilsan 4x2 mm <i>Tubo Rilsan 4x2 mm</i>	10 meters <i>10 metri</i>	1304.609 502
Tube SS 304 2x1 mm <i>Tubo SS 304 2x1 mm</i>	5 meters <i>5 metri</i>	1300.409 504
Tube 1/8" o.d. x 1/16" i.d. Copper <i>Tubo 1/8" o.d. x 1/16" i.d. Rame</i>	1 meter <i>1 metro</i>	1302.040 002

**FUSES**

Description	Set of	Code
Fuse fast F 5x20 315mA 250V <i>Fusibile rapido F 5x20 315mA 250V</i>	10 pieces <i>10 pezzi</i>	3841.095 001
Fuse fast F 5x20 0.5A 250V <i>Fusibile rapido F 5x20 0.5A 250V</i>	10 pieces <i>10 pezzi</i>	3841.095 002
Fuse fast F 5x20 0.63A 250V <i>Fusibile rapido F 5x20 0.63A 250V</i>	10 pieces <i>10 pezzi</i>	3841.095 003
Fuse fast F 5x20 1A 250V <i>Fusibile rapido F 5x20 1A 250V</i>	10 pieces <i>10 pezzi</i>	3841.095 004
Fuse fast F 5x20 2A 250V <i>Fusibile rapido F 5x20 2A 250V</i>	10 pieces <i>10 pezzi</i>	3841.095 005
Fuse fast F 5x20 3.15A 250V <i>Fusibile rapido F 5x20 3.15A 250V</i>	10 pieces <i>10 pezzi</i>	3841.095 006
Fuse fast F 5x20 4A 250V <i>Fusibile rapido F 5x20 4A 250V</i>	10 pieces <i>10 pezzi</i>	3841.095 008
Fuse T 5x20 0.63A 250V <i>Fusibile ritardato T 5x20 0.63A 250V</i>	10 pieces <i>10 pezzi</i>	3841.595 002
Fuse T 5x20 3,15A 250V <i>Fusibile ritardato T 5x20 3,15A 250V</i>	10 pieces <i>10 pezzi</i>	3841.595 008
Fuse T 5x20 1A 250V <i>Fusibile ritardato T 5x20 1A 250V</i>	10 pieces <i>10 pezzi</i>	3841.595 011
Fuse T 5x20 0.5A 250V <i>Fusibile ritardato T 5x20 0.5A 250V</i>	10 pieces <i>10 pezzi</i>	3841.595 001

**MISCELLANEOUS**

Description	Set of	Code
Silicon Oil <i>Olio Silicone</i>	1,5 liters <i>1,5 litri</i>	1156.090 001
Funnel <i>Imbuto</i>	1 piece <i>1 pezzo</i>	3002.560 000
		SPT 37.50



## MASTER GC - Fast Gas Chromatograph

Code	Description
0305.100 012	MASTER GC Main Frame
<b>Capillary columns injection systems</b>	
0305.102 071	OPT 011M - PTV-DHR Programmable Temperature Vaporizer
0305.102 072	OPT 022M - SL/IN Split-Splitless Injector
<b>Packed columns injection systems</b>	
0305.102 333	OPT 333M - Packed Column Injector with adapter for Widebore columns

Code	Description
0305.102 070	OPT 100M - FID Flame Ionization Detector
0305.102 111	OPT 111M - NPD Nitrogen Phosphorous Detector
0305.102 133	OPT 133M - ECD Electron Capture Detector
0305.102 144	OPT 144M - FPD Flame Photometric Detector with sulfur filter
0305.102 155	OPT 155M - PID Photoionisation Detector
0305.102 166	OPT 166M - TCD Thermal Conductivity Detector for Widebore columns + auxiliary gas line
0305.102 270	OPT 270M - micro TCD Thermal Conductivity Detector for Capillary columns
0305.102 266	OPT 266M - TCD Thermal Conductivity Detector for Packed Columns

## Liquid Autosamplers

Code	Description
0310.500 100	MASTER AS Liquid Autosampler

## Thermal Desorbers

0310.600 003	MASTER TD Thermal Desorber
0305.500 002	DANI AIRSampler for MASTER TD
0305.500 001	DANI AIRSampler for STD1000
3821.019 500	Line Selector for AIRSampler



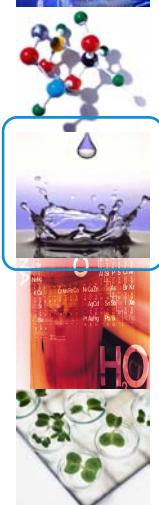
MASTER AS - Liquid Autosampler



MASTER TD - Thermal Desorber



MASTER GC - Fast Gas Chromatograph



## GC1000 - Digital Gas Chromatograph

Code	Description
0305.100 005	GC1000 Main Frame
<b>Capillary columns injection systems</b>	
0305.102 037	OPT 011 - PTV-DHR Programmable Temperature Vaporizer
0305.102 036	OPT 022 - SL/IN Split-Splitless Injector
<b>Packed columns injection systems</b>	
0305.102 038	OPT 333 - Packed Column Injector with adapter for Widebore columns
<b>Capillary and Packed columns detection systems</b>	
0305.102 030	OPT 100 - FID Flame Ionization Detector
0305.102 033	OPT 111 - NPD Nitrogen Phosphorous Detector
0305.102 034	OPT 133 - ECD Electron Capture Detector
0305.102 043	OPT 144 - FPD Flame Photometric Detector with sulfur filter
0305.102 032	OPT 155 - PID Photoionisation Detector
0305.102 067	OPT 166 - TCD Thermal Conductivity Detector for Widebore columns + auxiliary gas line
0305.102 042	OPT 270 - micro TCD Thermal Conductivity Detector for Capillary columns
0305.102 049	OPT 266 - TCD Thermal Conductivity Detector for Packed Columns

## Liquid Autosamplers

Code	Description
0307.310 001	HT310A Liquid Autosampler 10 vials
0307.300 001	HT300A Liquid Autosampler 110 vials

## Head Space Samplers

0310.100 001	HSS 86.50 Head Space Sampler, with Pressure regulator
0310.100 003	HSS 86.50 Head Space Sampler, with Flow regulator



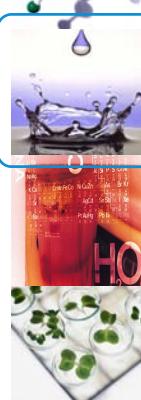
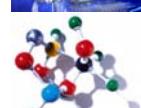
HT300A - Liquid Autosampler



GC1000 - Digital Gas Chromatograph



HSS 86.50 - Head Space Sampler



## Software

### Work Stations

- 0320.000 018 DANI DDS CLARITY™ MASTER GC-AS 1 instrument
- 0320.000 011 DANI DDS CLARITY™ 1 instrument 2 Channels + GC Control
- 0320.000 017 DANI DDS CLARITY™ 2 Channels + GC Control - U-PAD version

### Software

- 0320.000 012 DDS Clarity™ Single Instrument Station
- 0320.000 013 DDS Clarity™ Instruments Add-on

### Converters

- 3450.100 001 Board INT7 1 Channel
- 3450.100 002 Board INT7 2 Channels
- 3450.100 003 Board INT7 4 Channels
- 3450.100 004 U-PAD - External USB 2 Channels
- 3450.100 005 NET-PAD - External LAN 2 Channels

### Instruments Control Module (Clarity integrated)

- 0305.000 002 MASTER GC-AS Control Module
- 0305.000 001 GC1000 Control Module
- 0305.010 001 Liquid Samplers Control Module (ALS1000 - HT-300A)

### Software Options (Clarity integrated)

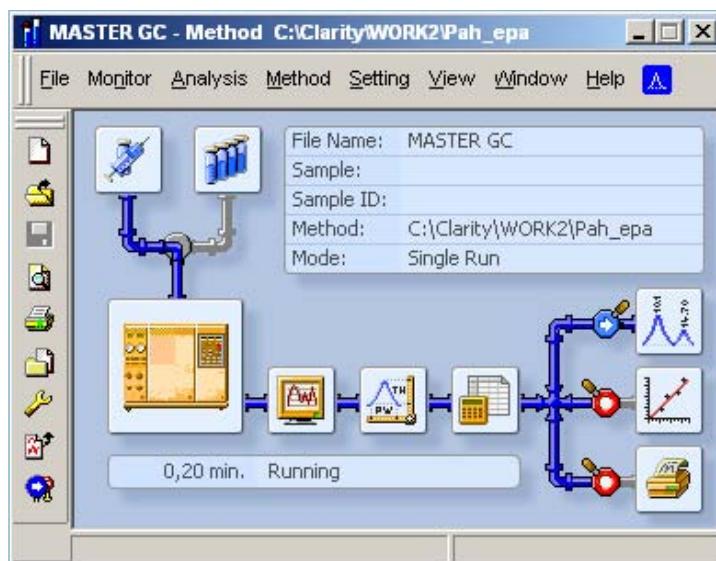
- 0305.010 002 SST - System Suitability Test
- 3950.000 001 DANI PETROCal Software

### Instruments Control Module (stand alone version)

- 3950.000 002 TD Manager Software

### DDS Clarity™ LITE

- 0320.000 014 DDS Clarity™ LITE - 1 channel
- 0320.000 015 DDS Clarity™ LITE - 2 channels
- 0320.000 016 DDS Clarity™ LITE - 4 channels



DANI DDS CLARITY™



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