

Colonne Gascromatografiche

SGE dispone di un'ampia gamma di colonne capillari per GC utilizzabili praticamente in qualunque applicazione cromatografica.

Di seguito sono riportate in modo sintetico le principali caratteristiche dei prodotti che SGE propone.

Inoltre indichiamo i codici dei principali produttori per le quali le colonne proposte sono sostituiti equivalenti.

100% Dimethyl Polysiloxane

BP1



An industry standard non-polar phase suitable for all routine analyses.

Application areas: suitable for analysis of hydrocarbons, aromatics, pesticides, phenol, herbicides, amines

Operating Temperature: 0.1-1.0 μ m film thickness -60°C to 340/360°C

1.5-3.0 μ m film thickness -60°C to 300/320°C

4.0-5.0 μ m film thickness -60°C to 280/300°C

Suitable replacement for:

DB-1, DB-Petro, HP-1, HP-1MS, Rtx-1, Ultra-1, SPB-1, SPB-1 Sulfur, Petrocol DH, CP-Sil 5CB, VB-1, ZB-1, VF-1ms.

SolGel-1ms



Robust high temperature non-polar phase for mass spectrometry applications.

Application Areas: recommended for highly active compounds

Operating Temperature: 0.25 μ m film thickness 0°C to 340/360°C

Suitable replacement for: DB-1, DB-Petro, HP-1, HP-1MS, Rtx-1, Ultra-1, SPB-1, SPB-1 Sulfur, Petrocol DH, CP-Sil 5CB, VB-1, ZB-1, VF-1ms.

BPX1



100% polydimethylsiloxane non-polar column range for Simulated Distillation in the petroleum industry.

Application Areas: ASTM methods D2887 and D6532

Operating Temperature: Aluminium Clad: 0.1 μ m film thickness -30°C to 430°C

Polyimide Clad: 0.1-0.9 μ m film thickness -30°C to 400°C

2.65 μ m film thickness -30°C to 370°C

Suitable replacement for: DB-2887, DB-HT Sim Dis, HP-1, Petrocol 2887, Petrocol EX2887, Rtx-2887.

BP1 PONA



A non-polar phase for PONA analysis.

Application areas: suitable for analysis of hydrocarbons, aromatics, pesticides, phenol, herbicides, amines

Operating Temperature: 0.1-1.0 μ m film thickness -60°C to 340/360°C

1.5-3.0 μ m film thickness -60°C to 300/320°C

4.0-5.0 μ m film thickness -60°C to 280/300°C

Suitable replacement for:

DB-1, DB-Petro, HP-1, HP-1MS, Rtx-1, Ultra-1, SPB-1, SPB-1 Sulfur, Petrocol DH, CP-Sil 5CB, VB-1, ZB-1, VF-1ms.

Colonne Gascromatografiche

5% Phenyl Methylpolysiloxane

BP5



A general purpose phase with excellent high temperature characteristics. Popular column range used for a wide variety of applications.

Application areas: suitable for analysis of hydrocarbons, aromatics, pesticides, phenol, herbicides, amines

Operating Temperatures: 0.25-1.5 μ m film thickness -60°C to 320/340°C

>1.5 μ m film thickness -60°C to 280/300°C

Suitable replacement for: DB-5, Rtx-5, HP-5, Ultra-2, PTE-5, SPB-5, MDN-5, CP-Sil 8CB, VB-5, ZB-5.

BP5MS



Optimized Silphenylene content for general purpose MS analyses. Perfect for your 5% MS analysis. Non polar, 5% equivalence. Low bleed, great inertness.

Application Areas: Ultra trace analyses, pesticides/herbicides, hydrocarbons, solvents, phenols, amines, GC/MS and other specific detector applications

Operating Temperature: -40°C to 330/350°C

Suitable Replacement for: DB-5ms, ZB-5ms, Rxi-5Sil MS, VF-5ms, CP-Sil 8 CB.

5% Phenyl Polysilphenylene-siloxane

BPX5



MS-Premium, low bleed column range with a maximum temperature up to 370°C. Suitable for trace analysis of pesticides, drugs, hydrocarbons and phenols. The BPX5 phase has been designed for robustness and is suitable for over 80% of all routine analyses performed by chromatographers.

Application Areas: Ultra trace analyses, pesticides/herbicides, hydrocarbons, solvents, phenols, amines, GC/MS and other specific detector applications

Operating Temperature: 0.25-1.5 μ m film thickness -40°C to 360/370°C

>1.5 μ m film thickness -40°C to 350/360°C

Suitable Replacement for: DB-5, DB-5ms, DB-5.625, XTI-5, Rtx-5ms, Ultra-2, HP-5, HP-5MS, HP5-TA, SPB-5, MDN-5S, CP-Sil8CB, Rxt-Sil 5MS, AT-5ms, VB-5, ZB-5, VF-5ms.

5% Phenyl Polycarborane-siloxane

HT5



Unique high temperature phase suited for simulated distillation and other petroleum applications. This column is the highest temperature column available with a maximum temperature up to 480°C.

Application Areas: Simulated distillation, general hydrocarbon profiles, pesticides/herbicides, GC/MS applications

Operating Temperature: Polyimide Clad: 0.1-0.5 μ m film thickness 10°C to 380/400°C

Aluminum Clad: 0.1-0.5 μ m film thickness 10°C to 460/480°C

Suitable Replacement for: MXT-1 Sim Dist, HT-Sim, DistCB, MXT-500.

Colonne Gascromatografiche

8% Phenyl Methylpolysiloxane

HT8



Unique high temperature phase suited for the analysis of PolyChlorinated Biphenyl (PCB) congeners. The unique polarity of this phase gives excellent separation of PCB congeners.

Application Areas: PCB congener analyses, nitro-substituted aromatics, polynuclear aromatic hydrocarbons, pesticides/herbicides

Operating Temperature: 0.1-1.0µm film thickness -20°C to 360/370°C

Suitable Replacement for: No equivalents, unique ultra high temperature column.

35% Phenyl Polysilphenylene-siloxane

BPX35



MS-Premium, low bleed column range with a maximum temperature up to 360°C. Especially suited for trace analysis of herbicides and aromatic compounds.

Application Areas: Environmental analyses, pesticides/herbicides, drugs of abuse, pharmaceuticals, polynuclear aromatic hydrocarbons, GC/MS applications

Operating Temperature: 0.1-1µm film thickness 10°C to 330/360°C

Suitable Replacement for: DB-35, DB-35ms, Rtx-35, HP-35, HP-35MS, SPB-35, MDN-35.

BPX608



Maximum temperature 370°C. Optimized for ECD. Ideal for the analysis of organochlorine herbicides and pesticides.

Application Areas: Environmental analyses, pesticides/herbicides, drugs of abuse, pharmaceuticals, polynuclear aromatic hydrocarbons, GC/MS applications

Operating Temperature: 0.1-1µm film thickness 10°C to 330/360°C

Suitable Replacement for: DB-35, DB-35ms, Rtx-35, HP-35, HP-35MS, SPB-35, MDN-35.

50% Phenyl Polysilphenylene-siloxane

BPX50



MS-Premium, low bleed columns with a maximum temperature up to 350°C. Suited for a range of EPA methods and pharmaceutical applications.

Application Areas: EPA methods 604, 608, 8060, 8081, triazines/herbicides, drug screening, steroids and a variety of pharmaceutical applications

Operating Temperature: 0.1-1µm film thickness 80°C to 330/350°C

Suitable Replacement for: OV-17, SP-2250, DB-17, DB-17ms, DB-17ht, Rtx-50, SPB-50, HP-50+, HP-17.

70% Phenyl Polycarborane-siloxane

BPX70



MS-Premium, low bleed column range with a maximum temperature up to 260°C. The polarity has been designed for Fatty Acid Methyl ester (FAME) analysis.

Application Areas: Fatty acid methyl esters, carbohydrates, pharmaceuticals, GC/MS applications

Operating Temperature: 0.1-1.0µm film thickness 50°C to 250/260°C

Suitable Replacement for: DB-23, Rtx-2330, SP-2330, CP-Sil 88, SP2380, HP-23.

Colonne Gascromatografiche

90% Phenyl Polycarborane-siloxane

BPX90



MS-Premium, low bleed column range with a maximum temperature up to 280°C. Extremely polar phase for the fast separation of aromatics, perfumes, petrochemicals and other compounds that are difficult to resolve using conventional columns.

Application areas: ideal for fast separation of fragrances, aromatics, petrochemical, pesticides, PCBs and isomers of Fatty Acid Methyl Esters (FAMES)

Operating temperatures: 0.25-0.50µm film thickness 80°C to 280°C

Suitable Replacement for: Unique to SGE.

Polyethylene Glycol (PEG)

SolGel-WAX



Robust, high temperature polar WAX phase. Less susceptible to damage by oxygen than conventional wax phases.

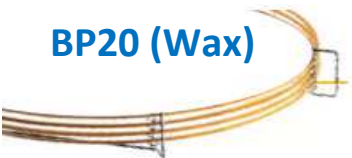
Application Areas: Recommended for highly active compounds

Operating Temperature: 0.25-1.0µm film thickness 30°C to 260/280°C

Suitable replacement for:

DB-Wax, Rtx-Wax, Stabilwax, HP20M, HP-Wax, HP-INNOWax, Supelcowax-10, AT-Wax, Nukol, CP Wax 52CB, VB-WAX, ZB-WAX.

BP20 (Wax)



A very polar phase suited to the analysis of alcohols, ketones and aldehydes. Also offers excellent separation of aromatic isomers such as the xylene isomers.

Application Areas: alcohol, free acids, fatty acid methyl esters, aromatics, solvents, essential oils

Operating Temperature: 0.1-1.0µm film thickness 20°C to 260/280°C

>1.0µm film thickness 20°C to 240/260°C

Suitable Replacement for: DB-Wax, HP-20M, Supelcowax 10, CB-Wax, Stabilwax, Carbowax, HP-Innowax, Rtx-WAX, PE-WAX, RH-WAX, ZB-WAX, TRWAX.

Treated Polyethylene Glycol (PEG)

BP21 (FFAP)



A very polar Nitroterephthalic acid modified PEG phase suited to the analysis of free fatty acids.

Application Areas: Volatile free acids, fatty acid methyl esters, alcohols, aldehydes, acrylates, ketones

Operating Temperature: 0.25-1.0µm film thickness 35°C to 240/250°C

Suitable Replacement for: DB-FFAP, HP-FFAP, Stabilwax-DA, CPWax-58CB.

Colonne Gascromatografiche

14% Cyanopropylphenyl Polysiloxane

BPX10 (1701)



This phase has been selected with a polarity suited for the separation of organochlorine pesticides listed in the EPA 608 and 8081 methods.

Application Areas: Environmental analyses (EPA methods 608 and 8081), pesticides/herbicides, drugs of abuse, pharmaceuticals

Operating Temperature: 0.25-0.5 μ m film thickness -20°C to 280/300°C

1.0 μ m film thickness -20°C to 260/280°C

Suitable Replacement for: DB-1701, Rtx-1701, SPB-7, HP-1701, CP-Sil 19CB, 007-1701, PE-1701, SP-1701.

Cyanopropylphenyl Polysiloxane (Volatiles)

BPX-VOLATILES



A polar phase used for EPA volatile organics analysis (EPA 624, SW-846 8240/8260), alcohol analysis and for USP G43. 290/300°C maximum temperature.

Application Areas: Environmental analyses, volatile organics, alcohol analysis, USP G43

Operating Temperature: 1.0-3.0 μ m film thickness 0°C to 290/300°C

Suitable Replacement for: DB-VRX, HP-624, OPTIMA 624, ELITE-624, 007-624, RTX-VOLATILES, SPB-624, TRV1, CPSIL 13 CB, VOCOL, VB-624, CP-624.

BP624



A polar phase used for EPA volatile organics analysis (EPA 624, SW-846 8240/8260), alcohol analysis and for USP G43.

Application Areas: EPA method 624, drinking water volatiles, chlorinated hydrocarbons, solvents

Operating Temperature: 1.0-3.0 μ m film thickness 0°C to 230/240°C

Suitable Replacement for: DB-624, OV-624, AT-624, HP-VOC, CP-Select624CB, 007-624, Rtx-Volatiles, VOCOL, ZB-624.

Permethylated Beta Cyclodextrin (Chiral)

CYDEX-B



Chiral columns for the separation of enantiomeric compounds found in natural products.

Application Areas: Separation of enantiomeric compounds found in natural products

Operating Temperature: 30°C to 220/240°C

Suitable Replacement for: Cyclodex-B, Rt-BDEXm.