



NEW LION

GC COLUMNS HAVE ARRIVED



FLEXIBLE SOLUTION
FOR YOUR APPLICATIONS





Lion GC columns have arrived to offer you a broad range of stationary phases and flexibility in capillary dimensions. What benefits do these GC capillary columns bring you?

- Strict quality control, each column individually tested.
- Column box includes column test mixture and scoring wafer.
- High flexibility in column dimensions and film thickness.
- Customer specific columns available.

LION stationary phases

LN-WAX BA	Stationary phase composition	Max. temp. *
LN-1	100% Dimethyl polysiloxane	Up to 350 °C
LN-5	5% Phenyl, 95% methyl polysiloxane	Up to 350 °C
LN-13	13% Phenyl, 87% dimethyl polysiloxane	Up to 340 °C
LN-20	20% Phenyl, 80% dimethyl polysiloxane	Up to 340 °C
LN-35	35% Phenyl, 65% methyl polysiloxane	Up to 340 °C
LN-17	50% Phenyl, 50% methyl polysiloxane	Up to 340 °C
LN-200	Trifluoropropyl methyl polysiloxane	Up to 250 °C
LN-624	6% Cyanopropyl phenyl, 94% methyl polysiloxane	Up to 280 °C
LN-1301	6% Cyanopropyl phenyl, 94% methyl polysiloxane	Up to 280 °C
LN-1701	14% Cyanopropyl phenyl, 86% methyl polysiloxane	Up to 280 °C
LN-225	25% Cyanopropyl, 25% phenyl, 50% methyl polysiloxane	Up to 260 °C
LN-WAX	Polyethylene glycol (PEG)	Up to 250 °C
LN-WAX Plus	Polyethylene glycol (PEG) inert and water resistant	Up to 270 °C
LN-FFAP	Acid modified polyethylene glycol (PEG)	Up to 250 °C
LN-WAX BA	Basic modified polyethylene glycol (PEG)	Up to 250 °C
LN-23	50% Cyanopropyl, 50% methyl polysiloxane	Up to 260 °C
LN-FAME	100% Cyanopropyl polysiloxane	Up to 260 °C
LN-1 MS	100% Dimethyl polysiloxane – low bleeding	Up to 350 °C
LN-5 MS	5% Phenyl, 95% methyl polysiloxane – low bleeding	Up to 360 °C
LN-5 MS Plus	Silphenylene methyl polysiloxane – extra low bleeding and inert	Up to 350 °C
LN-5 Sil MS	Silphenylene methyl polysiloxane – extra low bleeding	Up to 360 °C
LN-XLB	Proprietary phase for semi-volatiles – low bleeding	Up to 360 °C
LN-35 MS	35% Phenyl, 65% methyl polysiloxane – low bleeding	Up to 340 °C
LN-17 MS	50% Phenyl, 50% methyl polysiloxane – low bleeding	Up to 340 °C
LN-624 MS	6% Cyanopro pylphenyl, 94% methyl polysiloxane – low bleeding	Up to 280 °C
LN-1701 MS	14% Cyanopropyl phenyl, 86% methyl polysiloxane – low bleeding	Up to 280 °C
LN-225 MS	25% Cyanopropyl, 25% phenyl, 50% methyl polysiloxane – low bleeding	Up to 240 °C
LN-WAX MS	Polyethylene glycol (PEG) – low bleeding	Up to 270 °C
LN-1 HT	100% Dimethyl polysiloxane – high temperature	Up to 400 °C
LN-5 HT	5% Phenyl, 95% methyl polysiloxane – high temperature	Up to 400 °C
LN-8 HT	Low to mid proprietary high temperature phase	Up to 400 °C
LN-35 HT	35% Phenyl, 65% methyl polysiloxane – high temperature	Up to 370 °C
LN-17 HT	50% Phenyl, 50% methyl polysiloxane – high temperature	Up to 370 °C
LN-65 HT	65% Phenyl, 35% methyl polysiloxane – high temperature	Up to 370 °C
LN-1701 HT	14% Cyanopropyl phenyl, 86% methyl polysiloxane – high temperature	Up to 320 °C
LN-WAX HT	Polyethylene glycol (PEG) – high temperature	Up to 300 °C

* The max. temperature depends on the stationary phase film thickness.
Other phases are available on request.

CROSS REFERENCE GUIDE

Standard GC phases

LION	Agilent / Varian	Machery-Nagel	Phenomenex	Restek	SGE	Supelco	UPS Method Classification
LN-1	DB-1, HP-1, CP Sil 5 CB	OPTIMA-1	ZB-1	Rtx-1	BP-1	SPB-1, Equity-1	G1, G2, G9, G38
LN-5	DB-5, HP-5, CP Sil 8 CB	OPTIMA-5	ZB-5	Rtx-5	BP-5	SPB-5, Equity-5	G27, G36, G41
LN-13	–	–	–	–	–	SPB-5, Equity-6	–
LN-20	–	–	–	Rtx-20	–	SPB-20	G28, G32
LN-35	DB-35, HP-35	–	ZB-35	Rtx-35	–	SPB-35, SPB-608	G28, G32, G42
LN-17	DB-17, HP-17, DB-608, CP Sil 24 CB	OPTIMA-17	ZB-50	Rtx-17	BPX-50	SPB-50	G3, G17
LN-200	DB-200, DB-210, VF-200 ms	OPTIMA-210	–	Rtx-200	–	–	G6
LN-624	DB-624, HP-624, VF-624ms	OPTIMA-1301, OPTIMA-624	ZB-624	Rtx-1301, Rtx-624	BP-624	SPB-624, Voccol	G43
LN-1301	DB-624, HP-624, VF-624ms	OPTIMA-1301, OPTIMA-624	ZB-624	Rtx-1301, Rtx-624	BP-624	SPB-624, Voccol	G43
LN-1701	DB-1701, HP-1701, DB-1701P, CP Sil 19 CB	OPTIMA-1701	ZB-1701	Rtx-1701	BP-10	SPB-1701, Equity-1701	G46
LN-225	DB-225, HP-225	OPTIMA-225	–	Rtx-225	BP-225	SPB-225	G7, G19, G26
LN-WAX	DB-Wax, HP-Wax, CP Wax 52 CB	OPTIMA-WAX	ZB-WAX	Rtx-Wax	BP-20	–	G14, G15, G16
LN-WAX Plus	InnoWax	–	ZB-WAXplus	Rtx-Wax	–	–	G14, G15, G16
LN-FFAP	DB-FFAP	–	ZB-FFAP	Stabilwax-DA	BP-21	Nukol	G14, G15, G16, G25, G35, G39
LN-WAX BA	CAM, HP-BasicWax	–	–	Stabilwax-DB	–	–	–
LN-23	DB-23, VF-23 ms	–	–	Rtx-2330	BPX-70	SP-2330, SP2331, SP2380	G8
LN-FAME	HP-88, CP Sil 88	–	ZB-FAME	Rtx-2560	BPX-70	SP-2560	G5, G8, G48

GCMS low bleed phases

LION	Agilent / Varian	Machery-Nagel	Phenomenex	Restek	SGE	Supelco	UPS Method Classification
LN-1 MS	DB-1 ms (UI), HP-1 ms, VF-1 ms	OPTIMA-1 MS Accent	ZB-1 ms	Rxi-1 ms	BP-1	Equity-1	G1, G2, G9, G38
LN-5 MS	HP-5 ms	OPTIMA-5 MS	ZB-5 plus	Rtx-5 MS	BPX-5	Equity-5	G27, G36, G41
LN-5 MS plus	DB-5 ms UI, VF-5 ms	OPTIMA-5 MS Accent	ZB-5 MSplus, ZB-Semivoaltiles	Rxi-5 Sil MS	–	SLB-5 ms	G27, G36, G41
LN-5 Sil MS	DB-5 ms, VF-5 ms	OPTIMA-5 MS Accent	ZB-5 ms	Rtx-5 Sil MS	–	SLB-5 ms	G27, G36, G41
LN-XLB	DB-XLB	OPTIMA-XLB	ZB-XLB (HT)	Rtx-XLB	–	–	–
LN-35 MS	DB-35 ms (UI), VF-35 ms	OPTIMA-35 MS	ZB-MultiResidue 2 (MR-2)	Rxi-35 Sil MS	BPX-35, BPX-608	–	G28, G32, G42
LN-17 MS	DB-17 ms, VF-17 ms	OPTIMA-17 MS	–	Rxi-17 Sil MS	BPX-50	–	G3, G17
LN-225 MS	DB-225 ms	–	–	–	–	–	G7, G19
LN-624 MS	VF-1301 ms, VF-624 ms	OPTIMA-624 LB	–	Rxi-624 Sil MS	–	–	G43
LN-WAX MS	HP-INNOWax, VF-Wax ms	–	ZB-WAX	Stabilwax MS	–	–	G14, G15, G16

CROSS REFERENCE GUIDE

High temperature GC phases

LION	Agilent / Varian	Machery-Nagel	Phenomenex	Restek	SGE	Supelco	UPS Method Classification
LN-1 HT	DB-1 HT	–	ZB-1 HT inferno	Rxi-1HT	–	–	G1, G2, G9, G38
LN-5 HT	DB-5 HT	OPTIMA-5 HT	ZB-5 HT inferno	Rxi-5HT	–	–	G27, G36, G41
LN-8 HT	–	–	–	–	HT-8	–	–
LN-35 HT	–	–	ZB-35 HT inferno	–	–	–	G28, G32, G42
LN-17 HT	DB-17 HT	–	–	–	–	–	G3, G17
LN-1701 HT	–	–	–	–	–	–	G46
LN-WAX HT	DB-HeavyWax	–	–	–	–	–	G14, G15, G16
LN-65 HT	TAP-CB	–	–	Rtx-65TG	–	–	–

RECENT DEVELOPMENTS

Lion WAX HT

- Up to 290 °C for column ID 0.25 to 0.32 mm
- Up to 300 °C for column ID 0.10 mm (Fast GC)

Lion WAX Plus

- Up to 270 °C
- Higher inertness
- Compatible with water injections

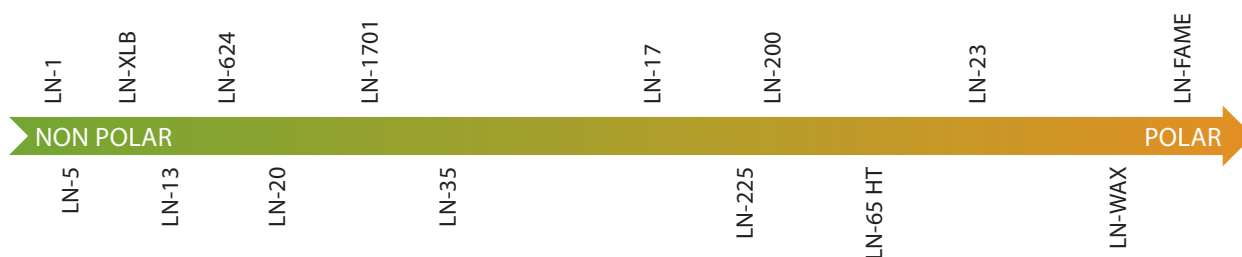
Lion FFAP Ext

- Up to 260 °C
- Higher inertness
- Compatible with water injections

Lion 5 MS Plus

- Improved inertness
 - Longer lifetime
 - Better stability
- More "PLUS" columns coming soon.

Phases Polarity chart



Distributor:

