


LD7

LD10

FILAMENT


ALCATEL



Filament	053146	LD10	\$135
Collector Single	083485	LD11	35
Collector Double	101127	LD12	35

FILAMENT

AGILENT



Repair Exchange

Tungsten	82850301	LD7RE	\$70
Iridium	82850302	LD8RE	110

Leak Detector Filaments


Fil-Tech's LD10's are drop-in replacements for the OEM part. Our filament is welded into the slotted posts for greater reliability and longer life.

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SHOP ONLINE NOW!


Nude Gauges & Filaments

Visit www.filtech.com for a complete listing of our nude gauges and replacement filaments.

AGILENT • AMAT • MKS


Bayard Alpert Gauges/Pin Guards

Flange 2 3/4" • Header Ceramic to Metal Seal • Degas E-Beam Only

MKS		AMAT	DESCRIPTION	
274028	\$609		Iridium Single	GB20IR \$490
274043	690	3310-01081	Iridium Single With Pin Guard	GB43IR 645

UHV Gauges/Pin Guards


Flange 2 3/4" • Header Ceramic to Metal Seal • Degas E-Beam Only

MKS		DESCRIPTION	
274022	\$609	Tungsten Dual	GU21T \$460
274023	656	Iridium Dual	GU21IR 510
274050	621	Tungsten Dual, NW40KF	GU50T 560
274041	690	Tungsten Dual With Pin Guard	GU41T 580
274042	725	Iridium Dual With Pin Guard	GU42IR 615
274057	708	Tungsten Dual, NW40KF w/Pin Guard	GU57T 580

AGILENT

X3004-64401	721	Iridium Dual	GU24IR 625
9715008	679	Tungsten Dual	GU24T 625

Replacement Filaments

AGILENT		DESCRIPTION	
9710018	\$125	Tungsten Dual	GF18 \$52
X3004-64403	239	Iridium Dual	GF28 106


MKS

274024	209	Tungsten Dual	GF24 80
274025	245	Tungsten Dual	GF25 106
274029	209	Iridium Single	GF29 106

One filament per box


CALIBRATED HELIUM LEAKS

NEW



RECALIBRATION

CL7	10-7ccHe/sec	\$700	Certification \$375
CL8	10-8ccHe/sec	735	NIST Traceable Certification



BD.

3 1/2

2 1/2

2

1 1/2

1

1/2

Fil-Tech Fluid™

ITEM	SIZE	TORRLUBE®	
FTF001	1 cc Syringe	\$112	\$100
FTF003	3 cc Syringe	247	275
FTF100	2-50 cc Bottles	1,280	1,100

Diffusion Pump Silicones

All Fil-Tech's fluids are the functional equivalent to Dow Corning's DC702, DC704, and DC705, respectively. They can be mixed and/or reprocessed together in any portion with their respective counterpart. Fil-Tech sells silicones!

FIL-TECH FT702, FT704 AND FT705 SILICONES REPLACE THE NO-LONGER-AVAILABLE DOW CORNING DC702, DC704 AND DC705 SILICONES

FT702 Phenylmethylsiloxane


is an economical general purpose silicone fluid for pumping large gas loads with thermal stability and oxidation resistance. Vacuum 10-5 to 10-7 torr.

FT704 Tetramethyltetraphenyltrisiloxane

is a single component fluid extensively used for applicators requiring rapid pump down of large gas loads. For performance and economics, your best choice. Vacuum 10-5 to 10-8 torr.

FT705 Pentaphenyltrimethyltrisiloxane

is a single component fluid for ultra high and ultra clean vacuums. For lowest ultimate pressure, your best choice. Higher resistance to crystallization. Vacuum 10-5 to 10-10 torr.




FT702	NEW	REPROCEESSING
1 Gallon	\$440	\$195
5 Gallon	2,000	

FT704

500 cc	\$90	
1 Gallon	550	195
5 Gallon	2,500	

FT705

500 cc	\$140	
1 Gallon	800	200
5 Gallon	3,800	




Call Fil-Tech at 800-743-1743 for a free DOT approved pail to collect your used fluid for remanufacture.

SHOP ONLINE NOW!

SANTOVAC 5

Polyphenyl Ether Diffusion Pump Fluid

SANTOVAC® 5 will provide vacuums in the 10-10 torr range with exceptionally low vapor pressure and backstreaming. It is excellent for applications that must be free of silicones or those requiring ultra high, clean vacuums.



SANT5-006	65 cc	\$240
SANT5-01	100 cc	325
SANT5-05	500 cc	1,245
SANT5-1	1 Gallon	7,450

TRADEMARKS

Fil-Tech®

OTHER TRADEMARK OWNERS

Agilent® Agilent Technologies, Inc.

Alcatel® Alcatel Vacuum Technology

AMAT® Applied Materials, Inc.

Axcelis® Axcelis Technologies, Inc.

Chemours® The Chemours Company

Convectron® MKS Instruments

Dow Corning® Dow Corning Corp.

CTI/Brooks® Brooks Automation, Inc.

Frontier Vacuum® Frontier Vacuum

High Performance® Ferrotec Corp.

INFICON® INFICON

InstruTech® InstruTech

Intellectrics® Intellevation Ltd.

Ion Tech® Veeco Instruments, Inc.

Kaufman & Robinson® Kaufman & Robinson

Krytox® The Chemours Company FC, LLC

Lam® Lam Research Corporation

Leybold® Oerlikon Leybold Vacuum

Maxtek® INFICON

MKS® MKS Instruments

Novellus® Novellus Systems, Inc.

QCM-I® Semilab Inc.

Q-Sense® Biolin Scientific Holding, AB

Santovac® Arch Technology Holding, LLC

Satisloh® Satisloh GmbH

Sloan® Veeco Instruments, Inc.

SuperSource® Ferrotec Corp.

Telemark® Telemark

Temescal® Ferrotec Corp.

Thermionics® TLI Enterprises, Inc.

TorrLube® The Torr Lube Company, LLC

ULVAC® ULVAC Technologies, Inc.

Umicore® Umicore

Unaxis® OC Oerlikon Corp., AG

Veeco® Veeco Instruments, Inc.

Windows® Microsoft, Inc.

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www.filtech.com

617-227-1133

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MECHANICAL PUMP FLUIDS & VACUUM VALVES

FT19

Molecularly distilled hydrocarbon fluid for non-corrosive applications. FT19 works well for all mechanical pumps.

SPECIFICATIONS		SIZES	PRICE
Vapor Pressure @ 25°C	1 x 10-5 torr	1 Gallon	\$40
Viscosity @ 40°C	54 cst (251 SUS)	5 Gallon	130
Viscosity @100°C	8 cst (52.7 SUS)	55 Gallon	1,175

FT20

Doubly distilled hydrocarbon fluid for corrosive or reactive applications. Ideal for direct drive and belt driven mechanical pumps and also suitable for diffusion pump applications.

SPECIFICATIONS		SIZES	PRICE
Vapor Pressure @ 25°C	1 x 10-6 torr	1 Gallon	\$70
Viscosity @ 40°C	58 cst (269 SUS)	5 Gallon	270
Viscosity @100°C	8.5 cst (54.1 SUS)	55 Gallon	2,125

FT70

High grade oil with temperature resistance and wear protection with extreme load-carrying capability. FT70 is safe for yellow metals in single stage pumps that run hot.

SPECIFICATIONS		SIZES	PRICE
Vapor Pressure @ 25°C	1 x 10-4 torr	1 Gallon	\$55
Viscosity @ 40°C	75 cst (350 SUS)	5 Gallon	200
Viscosity @100°C	9.4 cst (58 SUS)	55 Gallon	1,450

FT77

Molecularly distilled hydrocarbon fluid for rotary piston pump in non-corrosive applications. It has the high viscosity required for the proper lubrication of piston pumps.

SPECIFICATIONS		SIZES	PRICE
Vapor Pressure @ 25°C	1 x 10-4 torr	1 Gallon	\$45
Viscosity @ 40°C	90 cst (418 SUS)	5 Gallon	160
Viscosity @100°C	10 cst (58.8 SUS)	55 Gallon	1,300

FT87

Molecularly distilled hydrocarbon for large rotary piston pumps and roots blowers in non-corrosive applications requiring higher viscosity fluids.

SPECIFICATIONS		SIZES	PRICE
Vapor Pressure @ 25°C	4 x 10-4 torr	1 Gallon	\$50
Viscosity @ 40°C	100 cst (600 SUS)	5 Gallon	185
Viscosity @100°C	14 cst (64 SUS)	55 Gallon	1,325

FT97


Molecularly distilled hydrocarbon for large rotary piston pumps and roots blowers in non-corrosive applications requiring highest viscosity fluids.

SPECIFICATIONS		SIZES	PRICE
Vapor Pressure @ 25°C	4 x 10-4 torr	1 Gallon	\$55
Viscosity @ 40°C	205 cst (950 SUS)	5 Gallon	200
Viscosity @100°C	18 cst (85 SUS)	55 Gallon	1,435

FTTW

TECHNICAL WHITE
Molecularly distilled hydrocarbon fluid containing no additives. Specifically recommended for mechanical pumps exposed to reactive or corrosive gases. FTTW is the longest lasting hydrocarbon fluid.

SPECIFICATIONS		SIZES	PRICE
Vapor Pressure @ 25°C	<1 x 10-6 torr	1 Gallon	\$65
Viscosity @ 40°C	56 cst (260 SUS)	5 Gallon	270
Viscosity @100°C	9 cst (55.4 SUS)	55 Gallon	2,350




Frontier Vacuum

Fil-Tech distributes Frontier Vacuum Angle, Gate and Ball Valves. Frontier Vacuum offers 25 years of excellent quality valves at competitive prices to the semiconductor, solar, and thin film industries.

Vacuum Angle Valves
Frontier manual and pneumatic vacuum angle valves are designed for general use in vacuum systems, processes, and exhaust applications. They are particularly well suited for vacuum isolation or control under rigorous installation conditions. The angle valves are equipped with vacuum bellows and are highly effective in high vacuum environments. Frontier manual and pneumatic angle valves operate in a pressure range of 1x10-6 Pa to 1.2x10(5) Pa and are offered with DN25, DN40, DN63, DN80, and DN100 flanges.

Vacuum Gate Valves
Frontier vacuum gate valves offer a thin profile and low flow resistance. They transport gases and solids and can seal against atmospheric pressure. The valve plate moves within the body cavity without contacting the walls. When opening or closing, the valve plate expands or contracts linearly upon reaching the sealing surface and avoids friction on the O-ring seal on the valve plate. Frontier Vacuum gate valves are offered in manual or pneumatic, stainless steel and aluminum, have a leak rate of 1.3x10-10 PaM3/S, and are available with DN40-1320 flanges.

Vacuum Ball Valves
Frontier manual ball valves are used to start and cut off fluid flow in vacuum systems and can be used in gas and liquid pipeline systems under positive and negative pressure ranging from 1x10-6 Pa to 1.2x10(5) Pa. Frontier pneumatic 2-way and 3-way ball valves can withstand positive pressure to meet the requirements for ultra-high vacuum and accelerator systems and are used in vacuum systems ranging from 1x10-6 Pa to 4x10(5) Pa. Manual and pneumatic ball valves are offered with DN16, DN25, DN40, DN50, DN63, DN80, DN100, DN160 and DN200 flanges.



KRYTOX VACUUM PUMP FLUIDS

Krytox® Fluid

Chemours Krytox fluids are totally perfluorinated polyether fluids (PFPE) that are suitable for the harsh environments associated with semiconductor processes. The fluids are chemically inert, thermally stable, oxygen resistant and nonflammable. Available with controlled low vapor pressures and viscosities. Applications include plasma etching, LPCVP and 100% oxygen service.

Remanufacturing Service

Fil-Tech's remanufacturing service restores your contaminated KRYTOX or other PFPE fluids to their original properties at high recovery yields. The cost is a fraction of the price of new fluid. Call for pricing.




Authorized Distributor of Krytox™,
a Brand of The Chemours Company

1506	\$370/kg
1514	370/kg
1525	370/kg
1514XP	400/kg
1525XP	400/kg
XP Rust preventative fluid	
PFPE SOLVENT	
KXSOLV-1	\$600/gallon

Contact us for quantity discounts.
Call Fil-Tech for a free DOT approved pail to collect your used fluid for remanufacture.
800-743-1743



KRYTOX VACUUM GREASES

Chemours has a series of Krytox (PFPE) vacuum greases suitable for various applications. Your viscosity, temperature and vapor pressure requirements will determine your choice of grease. All Krytox greases are inert and suitable for applications requiring high temperature stability and low vapor pressure. They show excellent resistance to the aggressive environments inherent in the semiconductor industry. Krytox greases are oxygen compatible and hydrocarbon free.

SPECIFICATIONS		2 oz	8 oz	Kg	TEMPERATURE RANGE	VISCOSITY AT 40°C	VAPOR PRESSURE AT 40°C
Electronic Grade EG Greases	EG2000	\$130	\$475	\$2,240	-34°/288°C	240 cSt	2 x 10-8 torr
	EG3000	130	475	2,240	-29°/316°C	440 cSt	6 x 10-9 torr
Aerospace 240 Greases (milspec)	240AB	265	915	3,275	-40°/232°C	78 cSt	5 x 10-6 torr
	240AC	265	915	3,275	-34°/288°C	270 cSt	8 x 10-8 torr
	240AD	265	915	3,275	-29°/316°C	500 cSt	6 x 10-9 torr
Low Vapor Pressure Grease	LVP	130	480	1,920	15°/300°C	740 cSt	1 x 10-13 torr
General Purpose Greases	GPL202	60	190	650	-63°/132°C	15 cSt	Standard Grade
	GPL203	58	180	625	-60°/154°C	30 cSt	Standard Grade
	GPL205	58	180	625	-36°/204°C	160 cSt	Standard Grade
	GPL206	58	180	625	-36°/260°C	243 cSt	Standard Grade
	GPL207	58	180	625	-30°/288°C	450 cSt	Standard Grade
	GPL224	58	180	625	-51°/179°C	60 cSt	Anti Corrosion
	GPL226	58	180	625	-36°/260°C	160 cSt	Anti Corrosion
	GPL227	58	180	625	-30°/288°C	440 cSt	Anti Corrosion

KRYTOX GENERAL PURPOSE OILS

Krytox GPL oils are clear, colorless, fluorinated synthetic oils that are non reactive, nonflammable, safe in chemical and oxygen service, and long-lasting.

	Kg	TEMPERATURE RANGE	VISCOSITY AT 40°C
GPL101	\$630	-70°/104°C	7.8 cSt
GPL102	630	-63°/132°C	15 cSt
GPL103	605	-60°/154°C	30 cSt
GPL104	605	-51°/179°C	60 cSt
GPL105	605	-36°/204°C	160 cSt
GPL106	605	-36°/260°C	243 cSt
GPL107	605	-30°/288°C	450 cSt