

High Vacuum Pump Fluids and Greases

Apiezon L grease

A general purpose vacuum grease giving excellent lubrication. Stable, chemically inert, non-toxic, easy to apply and clean off with a good range of operating temperatures and conditions. Vapour pressure 10^{-10} torr at 20°C.

G096 Apiezon L grease 50g

Fomblin RT 15 vacuum grease

Fomblin vacuum grease has the important corrosion resistant properties and chemical inertness required for extreme applications. Fomblin when mixed with pure oxygen is non-flammable. Fomblin oils and greases are compounds made solely with carbon, fluorine and oxygen which cannot react to form hydrocarbons, hydrogen or siliceous surface contaminants.

G098 Fomblin RT 15 vacuum grease 100g

Diffusion Pump Fluid	Application	Ultimate Pressure @ 25°C (TORR)	Cat No.
Santovac 5 - Polyphenyl Ether A distilled ultra-pure synthetic diffusion pump fluid. Has exceptional tolerance to excessive gas loads and recovers rapidly from large pressure bursts. Thermally and chemically stable and requires no special handling.	Thin film evaporation, optical coating, UHV systems, electron microscopes, mass spectrometers, metallurgy, research.	1×10^{-10} <i>Equates to Convalex 10</i>	O095 100ml O096 500ml
Convoil-20 - Purified, distilled hydrocarbon for general vacuum use. Exhibits many of the characteristics of the synthetic fluids. Is thermally and chemically quite stable and an excellent lubricant.	Evaporation, sputtering, metallurgy, plasma etch.	5×10^{-6}	O102 5 litre O103 25 litre
CVC-2 Phenyl methyl siloxanes formulated as a diffusion pump fluid for pumping large gas loads. Used extensively where rapid cycling is required.	Electronics, metallurgy, vacuum coating, sputtering optical coating, research.	1×10^{-8}	O131 500ml O132 1 Kg O133 5 Kg O134 25 Kg
CVC-4 Silicone Fluid. Tetramethyl tetraphenyl trisiloxanes formulated as a diffusion pump fluid. Provides fast pump down times and has strong resistance to heat, oxidation and radiation.	Electronics, metallurgy, vacuum coating, sputtering optical coating, research.	1×10^{-8}	O097 500ml O098 1 Kg O099 5 Kg O100 25 Kg
DC-702 - Silicone Fluid. Phenyl methyl siloxanes formulated as a diffusion pump fluid for pumping large gas loads. Offers good oxidation resistance and is used where rapid cycling is required.	Evaporation, sputtering, electronics, metallurgy, optical coating.	5×10^{-7}	O104 500ml O105 5 Kg O106 25 Kg
DC-704 Silicone fluid. Tetramethyl tetraphenyl trisiloxane shows excellent heat, oxidation and radiation resistance. Provides fast pump down times with very good ultimate pressure characteristics. Withstands pressure bursts and is thermally and chemically stable.	Evaporation, sputtering, optical coating, metallization, UHV systems, electronics, research, metallurgy.	1×10^{-8}	O107 500ml O108 5 Kg O109 25 Kg
DC-705 - Silicone fluid. Pentaphenyl trisiloxane has excellent ultimate pressure characteristics and is ideal for ultra high vacuum applications. Chemically and thermally very stable with an extremely slow backstreaming rate. The best choice where a very clean vacuum is required.	Vacuum deposition, electronics industry, special UHV systems.	3×10^{-9}	O110 500ml

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Evaporation Supplies

Mechanical Pump Fluid	Application	Ultimate Pressure (TORR) @25°C	Cat No
TW-7 Specifically formulated for the increasing demands from the reactive and corrosive gas applications in the semiconductor industry. 100% paraffinic USP Grade	Highly recommended for nitride deposition, plasma etch and is an excellent choice when synthetic diffusion pump fluids are being used.	10 ⁻⁶	O111 5 litre O112 25 litre
68W/100W (ISO 68 or 100) Technical white oil - extremely hydrophobic and resistant to corrosive gases. Has a very long useable life and offers excellent pump protection.	Ideal for use with aggressive and corrosive gases and where water vapour causes emulsification.	10 ⁻⁶ <i>68W replaces Edwards 15, 17, 19 & Supergrade A</i> <i>100W replaces Edwards 16, 18 & 20</i>	O113 68W 5litre O114 68W 25l O115 100W 5l O116 100W 25l
Plasma Oil-80 Distilled hydrocarbons developed especially for mechanical pumps. An excellent choice when a synthetic fluid is used in the diffusion pump.	Plasma etch, deposition, ion implantation, distillation, mass spectrometers and general use.	10 ⁻⁶	O117 1 litre O118 5 litre
GBR 19 Purified hydrocarbons. Excellent lubricating properties with resistance to gum formation and oxidation.	General use and direct drive pumps	10 ⁻⁵	O119 2 litre O120 5 litre O121 25 litre
GBR 50 Formulated from highly refined mineral oils with excellent anti oxidation and corrosion properties.	General use and direct drive pumps	10 ⁻⁴	O122 2 litre O123 5 litre O124 25 litre
GBR 16 ISO 32. Purified hydrocarbon with excellent thermal and corrosion resistant properties.	General use.	10 ⁻³ <i>Equates to U15</i>	O125 5 litre O126 25 litre
Krytox 1506 (ISO 65), Krytox 1514 (ISO 170) Krytox 1525 (ISO 280). Pure perfluorinated polyether - non flammable and inert to most chemicals. These substances rank amongst the most stable and inert fluids known.	For pumping explosive and corrosive gases.	Krytox 1506 10 ⁻⁷ @ 20°C Krytox 1514 10 ⁻⁷ @ 20°C Krytox 1525 10 ⁻⁵ @ 20°C <i>Equates to 'Fomblin' oils</i>	O127 1Kg O128 1Kg O129 1Kg
Turbo Pump Oil-TMPLO 12	Lubricating oil suitable for all turbomolecular pumps Equivalent to TLO 11		O130 250ml

Vacuum Greases	V P	ASTM M P	ASTM Penetrometer	Cat No	Leak Sealant
DC 970V The most popular grease for vacuum applications giving the same benefits as silicone fluids.			175-210	G145 50g G146 5 Kg	Celvaseal A silicon resin solution sold in spray cans. G162 Spray can 16oz
Celvacene A general purpose hydrocarbon grease for most vacuum applications. Sold in three grades - Light , Medium and Heavy	10 ⁻⁶	Light 90°C M 120°C H 130°C	120-190 75-120 45-75	G147 ¼lb G148 1lb G149 ¼lb G150 1lb G151 ¼lb G152 1lb	
GPL 207 A per fluorinated poly ether grease that gives excellent resistance to chemicals and aggressive gases.	10 ⁻³	<i>Equates to Fomblin AR 555 (RT15)</i>		G153 2oz tube	