

Specifically developed for vacuum

Using the right oil in your vacuum pump is essential. To enable this, we offer an extensive range of oil and technical fluids specifically designed to suit vacuum applications. We work with leading chemists in each technological field to challenge convention and deliver innovation. All of our lubricants are tested under laboratory conditions and are validated over thousands of hours of operation. As a result, we are able to offer oil that will enhance performance, extend life and save energy.

Thermal ageing of mineral oil can be reflected as a colour change. Monitoring this change in a vacuum pump is necessary for assessing continuous and reliable performance.

- 1.  Good oil
- 2.  Good oil
- 3.  Continue to monitor
- 4.  Ideally the oil should be changed and replaced
- 5.  Should the colour resemble 5/6 the pump will require a clean and overhaul or full service
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Ultragrade® EXTEND

Next generation di-ester oil designed to provide long-term lubrication with excellent oxidative and thermal stability.

	110
Oil Type	Di-ester Oil
Vapour Pressure	5×10^{-6} @ 20°C
Viscosity	98 cSt @ 40°C
Bottle Size	1L / 4L
Uses	Large and small capacity rotary vane pumps. Dry pump gears under vacuum or partial pressure.
Edwards Pumps	nES and E2S



Ultragrade® Kinetic

Synthetic oil designed to give longer life of embedded wear parts and guarantee total drive efficiency of your vacuum pump.

	150	220
Oil Type	PAO Synthetic	PAO Synthetic
Vapour Pressure	3×10^{-3} @ 20°C	3×10^{-3} @ 20°C
Viscosity	150 cSt @ 40°C	223 cSt @ 40°C
Bottle Size	1L / 4L / 205L	4L / 205L
Uses	Used in various industrial boosters, blowers and dry pumps.	Used in high capacity vacuum boosters and pressure blowers.
Edwards Pumps	GMB40K, EDC, EDS	HV30000 and HV40000

Ultragrade® Performance

Ultragrade® Performance has been designed to improve vacuum performance and withstand high operating temperatures without oil degradation.

	15	19
Oil Type	Mineral Oil	Mineral Oil
Vapour Pressure	5.8×10^{-6} @ 20°C	1.0×10^{-6} @ 20°C
Viscosity	38.1 cSt @ 40°C	48.6 cSt @ 40°C
Bottle Size	1L / 4L / 205L	1L / 4L / 205L
Uses	Small rotary vane pumps (0.5-5m³/hr) where cold start capability or low starting torque is needed.	Small and medium size two stage rotary vane pumps where high ultimate vacuum and good lubrication are required.
Edwards Pumps	E2M0.7 and E2M1.5	RV, E2M18 and E2M28

	20	70
Oil Type	Mineral Oil	Mineral Oil
Vapour Pressure	2.1×10^{-7} @ 20°C	2.1×10^{-7} @ 20°C
Viscosity	103 cSt @ 40°C	70 cSt @ 40°C
Bottle Size	1L / 4L / 205L	4L / 205L
Uses	Gearboxes and drive trains under vacuum or partial pressure. Large single stage rotary vane pumps requiring a heavier grade oil to create a vacuum seal.	Large capacity two stage rotary vane pumps especially when used under high load or fast duty cycles.
Edwards Pumps	EH Boosters	E1/2M40 – E1/2M275 and E2S

Ultragrade® Performance

Ultragrade® Performance Pure are H2-specific vacuum lubricants used in food processing applications.

NEW

NSF	Pure 15	Pure 19
Oil Type	H2 Foodgrade Mineral Oil	H2 Foodgrade Mineral Oil
Vapour Pressure	5.8×10^{-6} @ 20°C	1.0×10^{-6} @ 20°C
Viscosity	38.1 cSt @ 40°C	48.6 cSt @ 40°C
Bottle Size	1L / 4L	1L / 4L
Uses	Small rotary vane pumps.	Small and medium size two stage rotary vane pumps.
Edwards Pumps	E2M0.7 and E2M1.5	RV, E2M18 and E2M28

NSF	Pure 20	Pure 70
Oil Type	H2 Foodgrade Mineral Oil	H2 Foodgrade Mineral Oil
Vapour Pressure	5.8×10^{-6} @ 20°C	2.1×10^{-7} @ 20°C
Viscosity	150 cSt @ 40°C	223 cSt @ 40°C
Bottle Size	1L / 4L	4L
Uses	Large single stage rotary vane pumps requiring a heavier grade oil.	Large capacity two stage rotary vane pumps.
Edwards Pumps	EH Boosters	E1/2M40 – E1/2M275

Edwards Speciality

We offer a range of oil and fluids suited to specific applications.

	L9	201
Oil Type	Naphthalene based synthetic fluid	Hydrocarbon fluid
Vapour Pressure	7.8×10^{-10} @ 20°C	5×10^{-6} @ 20°C
Viscosity	71.3 cSt @ 20°C	18 cSt @ 20°C
Bottle Size	1L	20L / 205L
Uses	Chemically stable and resistant to acids, alkalis, halogens and oxides of nitrogen. Ideal in applications where silicones can not be tolerated.	Fluid has low viscosity which permits easy filling and draining. Intended for high vacuum industrial applications where silicones can not be tolerated.
Edwards Pumps	Diffstak, HT20	Vapour Boosters

	45	TW
Oil Type	Synthetic Hydrocarbon	Hydrocarbon
Vapour Pressure	1×10^{-6} @ 20°C	1×10^{-6} @ 20°C
Viscosity	49 cSt @ 20°C	56 cSt @ 20°C
Bottle Size	1L / 4L	1L / 4L / 20L
Uses	Molecular structure offers chemical inertness, high temperature stability and low vapour pressure.	Heavily distilled with unsaturated and aromatic links removed and no additives. Long lasting. Developed for applications where rotary pump oil are likely to be exposed to reactive or corrosive substances.
Edwards Pumps	EH Boosters	E1/2M40 – E1/2M275

	UHV fluid NEW	704
Oil Type	Silicone Oil	Silicone Oil
Vapour Pressure	5×10^{-11} @ 20°C	2.5×10^{-9} @ 20°C
Viscosity	38 cSt @ 20°C	37-42 cSt @ 20°C
Bottle Size	5L	500ml / 5 Kg / 25 Kg
Uses	Low vapour pressure, high viscosity and highly resistant to oxidation, chemicals and radiation. For diffusion pumps in high vacuum or ultra high vacuum applications.	Exhibits extreme chemical, thermal, oxidation and radiation resistance. Intended to be used in particularly tough and rugged applications. It is also suitable for all aspects of vacuum coating.
Edwards Pumps	nHT	HT

	705	Drynert 25/6
Oil Type	Silicone Oil	PFPE
Vapour Pressure	3×10^{-10} @ 20°C	4×10^{-8} @ 20°C
Viscosity	165-185 cSt @ 20°C	276 cSt @ 20°C
Bottle Size	500ml / 5 Kg / 25 Kg	1 Kg / 5 Kg
Uses	Exhibits extreme chemical, thermal, oxidation and radiation resistance. Intended for use where ultra high and ultra clean vacuum conditions are required.	Corrosive resistant properties and chemical inertness PFPE. Used in applications where hostile process conditions quickly destroy normal hydrocarbon pump oil.
Edwards Pumps	HT	GXS, EH, E2M(F)