

## AIRFORCE VPO HV & VPO LV VACUUM PUMP LUBRICANTS

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### Description

Airforce VPO grades are manufactured from high quality mineral oils designed to maximise pump efficiency and vacuum performance. These oils have extremely low volatility, excellent thermal and oxidative stability, making them suitable for use in pumps operating at high temperatures. Airforce VPO grades will also protect components from rust, corrosion and the formation of sludges.

### Applications

Recommended for use in a wide range of positive displacement vacuum pumps, including rotary vane, lobe, screw and reciprocating designs. Airforce VPO grades are suitable for use in the following makes of pump where oils of this type and performance are specified: Leybold, Edwards, Alcatel, Precision, HyVac, Robinair, etc.

Airforce VPO LV is particularly recommended for use in all milking machine pump applications, including: Alfa-Laval, DeLaval Int., Fullwood, Gascoigne-Melotte, Masport, Porter, Robinson, Simplex, etc., where a mineral based product of this type is specified.

Airforce VPO HV is designed for pumps drawing high vacuums (up to  $10^{-6}$  mm Hg /  $1.3 \times 10^{-5}$  Pa), whereas Airforce VPO LV is suitable for lower vacuums ( $1$  to  $1 \times 10^{-2}$  mm Hg /  $0.13$  to  $1.3 \times 10^{-3}$  Pa).

### Physical Characteristics

| Grade                        | LV                   | HV                   |
|------------------------------|----------------------|----------------------|
| Density @ 15°C               | 0.892                | 0.885                |
| Flash Point (closed) °C      | 200                  | 196                  |
| Viscosity at 40°C, cSt.      | 77.0                 | 99.4                 |
| Viscosity at 100°C, cSt.     | 8.3                  | 11.1                 |
| Viscosity Index              | 70                   | 95                   |
| Pour Point, °C               | -25                  | -30                  |
| Vapour Pressure / mbar, 20°C | $1 \times 10^{-8}$   | $2.1 \times 10^{-7}$ |
| mbar, 100°C                  | $1.0 \times 10^{-3}$ | $3.0 \times 10^{-3}$ |

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