marine lubricants

Cetus® PAG

Formerly known as LPG Compressor Oil

Description

Cetus® PAG is a synthetic compressor oil based on polyalkylene glycol. It is designed for use in reciprocating compressors for chemical and hydro-carbon gases, including natural gases such as LNG and LPG. Because the solubility of these gases in Cetus PAG is low, the oil maintains its viscosity, unlike mineral oil base lubricants which will dilute.

Typical Characteristics

MPID	219827
Density 15°C, kg/l	1.06
Flash Point, °C	260
Pour Point, °C	–30
Viscosity, kinematic	
mm²/s @ 40°C	185.0
mm²/s @ 100°C	35.0
Viscosity Index	238

Recommended Applications

Cetus PAG is recommended for lubrication of the cylinders and/or crankcase bearings of reciprocating compressors for multiple gases, including natural gases such as: methane and ethane; petroleum gases such as propane and butane; hydrocarbon chemical gases such as ethylene, propylene and butylene; and chemical gases such as ammonia, butadiene, vinylchloride and dry inert gases.

Cetus PAG easily mixes with water, therefore contact with humid air should be avoided.

Cetus PAG contains polyalkylene glycols and is not compatible with mineral oil or other synthetic fluids. When changing to or from Cetus PAG, the oil system should be completely drained and thoroughly flushed.

Cetus PAG does not affect common seal and gasket materials such as butyl, nitrile, neoprene, fluoro-elastomers (e.g. Viton) and fluoro-silicones. Ordinary industrial paints soften in the presence of this oil. Two-pack epoxy formulations are normally resistant.

Cetus PAG Is Approved For:

- ☑ **Howden Compressors**
- ☑ **Linde AG**
- ☑ **Burckhardt Compression AG** K- & Laby type compressors

Cetus PAG Meets The Requirements Of:

- ☑ **EPA** VGP 2013 EAL
- ☑ **Burckhardt** Lubricating Oil Specification (VSB) 1001301

Performance Benefits

1. Low solubility of multiple gases

The solubility of above-mentioned gases is much lower in Cetus PAG than in mineral based lubricants. Therefore, the viscosity drop of the lubricant in service is minimal. Oil film thickness, anti-wear and anti-foam performance of the formulation are maintained, and proper wear protection can be guaranteed, even at low cylinder feed rates.

2. Moisture tolerance

Cetus PAG will easily mix with water, for which the gases should be dry. The product tolerates up to 4%wt water before hazing at 80°C however, and has been evaluated for corrosion resistance with 2.5%wt water content.

3. Extended lubricant life

The robust formulation offers reliable, extended lubricant service life.

4. Reducing inventory

Formulated to resist dimerization of butadiene and to prevent the generation of solid deposits. Switching to mineral based compressor oil is no longer required in this case, which can help to reduce inventory and operational complexity.