

Product Data Sheet



Cetus DE 100 is a premium performance, synthetic compressor oil based on diester technology and containing an ashless inhibitor system providing protection against corrosion and outstanding oxidation resistance under severe operating conditions.

### APPLICATIONS

Cetus DE oils are used for portable and stationary rotary screw, rotary vane, and reciprocating compressors. While specific manufacturer recommendations vary, higher viscosity grades are preferred for reciprocating units.

Do not use in breathing air compressors or medical equipment.

These oils can be used in compressors with the following gases:

process air benzene butadiene carbon dioxide (dry) carbon monoxide ethylene	furnace (crack) gas helium hydrocarbon gases hydrogen inert gases methane	natural gas nitrogen propane sulfur hexafluoride and synthesis gas
DE oils can be used in contact with th	ne following seals, paints, and plastics:	
Viton® High nitrile Buna N® Teflon®	Epoxy paint Oil-resistant alkyd Nylon	Delrin® Celcon®.
oils should not be used with:		
Neoprene SBR rubber Low nitrile Buna N®	Acrylic paint Lacquer Polystyrene	PVC ABS

Note that this information is intended for general guidance only. The satisfactory lubrication of gas compressors with Cetus DE is dependant on numerous factors. Advice should be sought from the equipment manufacturer in specific circumstances. Advice should be sought from the equipment manufacturer to establish the acceptability of Cetus DE with elastomers in specific operating environments.

### BENEFITS

Cetus

These

# • Extended oil service life

Outstanding oxidation stability of the diester base fluid and inhibitor system resists oil breakdown at the elevated temperatures encountered in compressor service, permitting oil drain intervals to be extended beyond those achieved with conventional lubricants.

# • Protection at high and low temperatures

Diester base fluid ensures an effective oil film to protect loaded parts against wear under both high temperature operating conditions and during low temperature start-up. The inhibitor system provides good rust and corrosion protection.

### • Stable in severe service

Outstanding thermal and oxidation stability enable the diester lubricant to resist deposit formation in the heat of the compression cycle, even under the most severe service conditions.





#### **PERFORMANCE STANDARDS**

Cetus DE 100 meets the requirements of ISO-L-DAC for reciprocating and rotary (drip feed) air compressors and vacuum pumps operating under heavy-duty conditions

Cetus DE 100 is also recommended by select OEMs:

- Matsubara Iron Works Co. Ltd, for use as a reciprocating air compressor lubricant.
- Tanabe Pneumatic Machinery Co. Ltd, for use in their H-series reciprocating marine compressors

# **TYPICAL CHARACTERISTICS**

Product Code	1350
ISO Grade	100
Density at 15°C	0.959
Flash Point, COC, °C	252
Pour Point, °C	-40
Viscosity, at 40°C, mm²/s at 100°C, mm²/s	95.5 10.1
Viscosity Index	83

# PACK SIZES

208L, 20L

### SERVICE CONSIDERATIONS

Cetus DE Oils are designed to meet the requirements of modern higher output, more efficient compressors. These newer units are more compact and operate at higher speeds than older compressors. As a result, higher temperatures are experienced. As temperatures increase, deposit formation on valves and air separators can also increase. Operators of these newer compressors using Cetus DE Oils will experience minimal carbon, varnish and sludge deposits on valves and air separators.

Cetus DE Oils are compatible with conventional, non-detergent petroleum oils, although mixing will reduce the thermal and oxidation stability of the synthetic lubricant. However, it may not be compatible with seals, paints, plastics, etc., found in systems designed for petroleum oils. Where doubt exists, the equipment manufacturer should be consulted concerning compatibility with diester-based lubricants.

Diesters have excellent solvency and will aggressively "clean-up" systems deposits that might have formed while mineral oil based lubricants were in use. Therefore, oil filters need to be monitored frequently in the early stages after conversion to this product.





Cetus DE shares several properties and benefits with its PAO/synthetic ester based counterpart in the Caltex product range, Cetus PAO. Notably these are high temperature stability and long lubricant life, which typically dictate the choice of a synthetic compressor lubricant over a mineral oil product. Inevitably, there will be numerous applications for which either product could be recommended. In some cases, a stated OEM preference or approval for a specific synthetic technology may limit the choice of lubricant to one or the other.

### ENVIRONMENT, HEALTH AND SAFETY

A Material Safety Data Sheet (MSDS) is available for each product. Users should consult the MSDS, follow the precautions outlined and comply with all laws and regulations concerning its use and disposal. Used packaging material should not be incinerated or exposed to flame. After use, protect your environment. Do not pollute drains, soil or water with used product.

### **OTHER INFORMATION**

For further information on Caltex products and services call the Lubelink Advisory Service on 1300 364 169 between 8.00am and 6.00pm (EST) Monday to Friday.

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