

## Rheolube® 1000 Low Temperature Applications

Intended for instruments and bearings in aerospace vacuum applications that require very low vapor pressure and outgassing.

# PRODUCT OVERVIEW

Rheolube® 1000 is a sodium complex soap thickened, light viscosity, multiply-alkylated cyclopentane grease. This ultrafiltered grease ensures long-life of instruments and bearings in aerospace and vacuum applications.

#### **PACKAGING OPTIONS**

Rheolube® 1000 is available in:

- 30 cc syringe
- 150 g cartridge
- 500 g jar

If your application requires a specific container, please contact us for custom packaging.

#### **SAMPLES**

To qualify for a sample of Rheolube® 1000, contact your Regional Engineering Manager.



### **CHARACTERISTICS**

- Good lubricity and film strength
- Excellent vacuum stability

- Low torque performance
- · Excellent low temperature performance

Properties		Rheolube 1000	<b>Test Method</b>
Base Oil		Cyclopentane	
Thickener		Sodium Soap	
Temperature Range		-50 to 125°C	
Kinematic Viscosity of Base Oil	-40°C	24,910 cSt	ASTM D-455
	40°C	53 cSt	
	100°C	8 cSt	
Oil Separation	24 hrs, 100°C	0.29%	ASTM D-6184
Pour Point		-57°C	ASTM D-97
Dropping Point		260°C	ASTM D-2265
Penetration (1/10mm)	Worked (60X)	265	ASTM D-1403
	Unworked	253	
	NLGI Grade	2	

#### TEST RESULTS FOR THE AEROSPACE INDUSTRY



- Total Mass Loss = 2.3 wt%
- CVCM = 0.635 wt%
- 4 Ball Wear (ASTM D-2266):
  - Coefficient of Friction = 0.085%
  - Ball Wear Scar = 0.508mm

- Low Temp Torque (ASTM D-1478):
  - Starting  $(-40^{\circ}C) = 2079.8 \text{ g.cm}$
  - Running (10 mins) = 494.1 g.cm
  - Running (60 mins) = 320.1 g.cm

Rheolube® 1000, a MAC-based grease, is a specialized fluid that combines the low vapor pressure and low outgassing of a PFPE, with the lubricity and film strength of a PAO, therefore making it ideal for use in applications where long-life is critical to the mission.