

# Data Sheet TorrLube 11 Grease

Typical Properties\* of TorrLube® 11 Grease

Property	Typical Value	Method
Color	Off White	Visual
Appearance	Smooth	Visual
Apparent Viscosity, 25°C 1.4 mPa·s	71,865	CTM-4
Apparent Viscosity, 25°C 25 mPa·s	8,642	CTM-4
Oxidative Stability, 250°C minutes	>120	ASTM D5483
Thermogravimetric Analysis temp at 5% mass loss, °C	379	CTM-6
SOT Cycles	>500,000	СТМ
Four Ball Wear, mm	0.46	ASTM D2266
High Temperature Bearing Test 204°C	>1500	ASTM D3336

Chemical Signature	Match Standard	FT-IR
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SOT is a spiral orbit tribometer which is a laboratory test fixture that simulates "real world" bearing performance. Traditional PFPE greases fail after 50,000 cycles producing degraded polymer "Brown Sugar" caused by the formation of Lewis Acids due to metallic catalysis at contact asperities.

## **Specifications:**

The typical properties reported on this technical data sheet should not be used for preparing specifications on this grease. Please contact The TorrLube Company, LLC for assistance in preparing a specification.

#### Safety:

If fumes are generated at elevated temperatures, ventilation is required. See the Safety Data Sheet for additional safety related information on the grease.

#### Disclaimer:

Since we are unable to anticipate or control the conditions under which this information and our products may be used, we cannot guarantee the applicability of this information or suitability of our products in any specific application. Moreover, the products are sold without warranty, expressed or implied. Statements concerning the possible use of our products are not intended as recommendations to use our product in the infringement of any patent.

### **Description:**

TorrLube 11 Grease is a lubricant designed for applications where low volatility, chemical compatibility, and improved wear resistance compared to other PFPE lubricants is desired. This grease has been specifically formulated for turbomolecular pump bearings. Attributes of TorrLube 11 Grease include:

> Superior Thermooxidative Stability Wide Temperature Serviceability **Superior Antiwear Properties** Non-Melting Thickener System

Formulated to Resist Degradation Due to the "Brown Sugar" Phenomenon Superior Catalytic Stability per Spiral Orbit Tribometry Results

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