



TECHNICAL DATA SHEET

SANTOLUBE® OS-105

High-temperature Radiation-resistant Base Fluid

SANTOLUBE® OS-105 is a diphenyl ether derivative with exceptionally low volatility, good broad-temperature properties, and resistance to degradation from heat, oxygen, radiation, and chemical attack. SANTOLUBE® OS-105 is therefore suitable for use in designing lubricants for high-temperature and adverse environments. In addition, this base fluid is compatible with most metals, plastics, and elastomers. SANTOLUBE® 105 is considered essentially nontoxic, especially when proper hygienic practices are employed.

ATTRIBUTES

- ◆ Good Low-temperature Properties
- ◆ Resists Chemical Attack
- ◆ Resists Oxidation and Radiation Degradation
- ◆ High Thermal Stability
- ◆ High Surface Tension
- ◆ Excellent Resistance to Rust and Corrosion

TYPICAL PHYSICAL AND PERFORMANCE PROPERTIES¹

Appearance	Clear, Colorless Fluid	Corrosion and Oxidation Test - ASTM D 4636 (FTM 791-5307/5308) [180°C, 168h]	
Viscosity at 40°C – ASTM D 445, cSt	102	TAN Change	0
Viscosity at 100°C – ASTM D 445, cSt	12.75	Viscosity Change at 40°C	None
Pour Point – ASTM D 97, °C	-40	Metal Weight Change, mg	
Flash point – ASTM D 92, °C	277	Steel	0.02
Thermal Stability up to °C	286	Silver	0.03
Evaporation Loss at 180°C, 500hrs, % Wt.	5.5	Copper	0.14
Elastomer Compatibility – ASTM D 471 [Viton, Silicone, Teflon, Buna N]	Pass	Aluminum	0.04
Metals (Steel/Copper) Compatibility	Pass		

¹ Please note that these data are typical of samples tested in the laboratory and are not to be considered as sales specifications.