



TECHNICAL DATA SHEET

SANTOVAC® 5 ULTRA

Polyphenyl Ether Vacuum and High-temperature Fluid

SANTOVAC® 5 ULTRA vacuum and high-temperature fluid is a highly purified fluid, with exceptionally low volatility and extreme thermal stability. Like SANTOVAC® 5, it is extraordinarily resistant to degradation from heat, oxygen, radiation, and chemical attack. Hence, it is well suited for use in extreme high temperature and adverse environments. SANTOVAC® 5 ULTRA is compatible with most precious metals, base metals and elastomers, commonly used in high temperature and electronic applications. It is considered essentially nontoxic, when proper hygienic practices are employed. SANTOVAC® 5 ULTRA is especially useful in applications, such as those involving high vacuum, which can benefit from its extreme purity.

ATTRIBUTES

◆ Exceptionally Low Volatility	◆ High Thermal Stability
◆ Resists Chemical Attack	◆ High Refractive Index
◆ Resists Oxidation and Radiation Degradation	◆ Excellent Resistance to Rust And Corrosion
◆ Reduces Noise in Many Applications	◆ Precious Metal Protectant

TYPICAL PHYSICAL AND PERFORMANCE PROPERTIES¹

Appearance	Clear, Colorless Fluid	Corrosion and Oxidation Test - ASTM D 4636 (FTM 791-5307/5308) [600°F, 48h]	
Viscosity at 40°C – ASTM D 445, cSt	368	TAN Change	0
Viscosity at 100°C	13.1	Viscosity Change at 40°C	None
Pour Point – ASTM D 97, °C	4	Metal Weight Change, mg	
Flash point – ASTM D 92, °C	290	Steel	0.02
Refractive Index at 25°C	1.630	Silver	0.03
Vapor Pressure, mm Hg at 260°C	0.2	Copper	0.14
Thermal Stability up to °C	453	Aluminum	0.04
Surface Tension at 100°F, Dyne/cm	49.9	Elastomer Compatibility – ASTM D 471 [Viton, Silicone, Teflon, Buna N] Pass	
Precious Metals Compatibility	Pass	Steel and 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.