

HITEMP 600 LT

Product Description

HITEMP 600 LT is a synthetic Alkyl Benzene based heat transfer fluid designed to provide excellent thermal stability and oxidation resistance. These properties contribute to a longer service life compared with mineral oil. This product is designed to maintain efficient heat transfer performance and good flow characteristics due to its low viscosity. It also helps minimize deposit and coke formation, ensuring stable and reliable system operation over extended service periods.

Benefits

- Enable low viscosity and good flow properties promote efficient convective heat transfer performance over a wide operating temperature range
- Exhibits excellent thermal and oxidation stability to minimizes deposit and coke formation to help maintain system cleanliness
- Provides a longer service life than mineral grade
- Non-corrosive and non-toxic
- Can be topped up directly into systems using mineral-based heat transfer fluids (Please consult PTT Lubricants Solutions for application guidance)

Applications

- Designed for non-pressurized or low-pressure indirect heating systems with operating temperatures up to 300 °C*
- Recommended for liquid-phase operation only
- Recommend nitrogen blanketing of the expansion tank to help extend service life
- Recommended as a replacement for mineral hot oil
- Suitable for heat transfer systems requiring temperature control across a wide range of industries, including offshore, textiles, plywood, and general chemical processing

*Please consult PTT Lubricants Solutions for guidance on operating temperatures approaching 300 °C

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Typical Characteristics

Tests	Methods	Units	Results		
Density at 15 °C	ASTM D 4052	g/cm ³	0.8620		
Kinematic Viscosity at 40°C	ASTM D 445	mm ² /s	15.37		
Flash Point (COC)	ASTM D 92	°C	201		
Maximum Bulk Temperature		°C	300		
Maximum Film Temperature		°C	335		
Autoignition Temperature	ASTM D 2155	°C	350		
Physical & Thermal Properties versus Temperature		Unit	100°C	200°C	300°C
Density	ASTM D 7042	g/cm ³	0.8066	0.7406	0.6746
Viscosity	ASTM D 445	mm ² /s	3.414	1.045	0.539
Specific Heat	ASTM E 1269	kJ/kg·°C	2.59	3.23	4.35
Thermal Conductivity	ASTM D 2717	mW/m·K	116.8	105.5	88.1

Performance Standards

- Heat transfer fluid Q according to DIN 51522
- Classified as ASTM (ISO) 6743-12: Family Q
- Meets ISO-L-QC (Max. temp. >300°C and <320°C)

Health and Safety

This product shows no significant health or safety hazard when used under the recommended applications and suitable handling.

Avoid the direct contact. Wash immediately after contact. Health and safety information is available on the Safety Data Sheet (SDS) which can be obtained from <http://pttlubricants.pttor.com>



Note: Data and information contained in this publication are based on standard test under laboratory conditions and/or performance test. To consider the use of PTT Lubricants' products in particular application, customer is responsible for determining whether product and information are appropriate for customer conditions or should consult with PTT Lubricants' technical service division. The procedure of using any lubricant may differ or change depended on different machines and their manuals. Therefore, we recommend to read, understand and review the latest SDS in order to ensure the use of product is accomplished safety.

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