

## BAHRAIN LUBRICANTS HEAT TRANSFER FLUID HTO

High Performance Heat Transfer Fluids

### DESCRIPTION

BAHRAIN LUBRICANTS HEAT TRANSFER FLUID HTO are high performance HTOs formulated from highly refined base stocks that are resistant to thermal cracking and chemical oxidation & are intended for use in closed indirect heating installations. The flash points of these oils will not decrease significantly in service because of their resistance to thermal cracking at the operating temperatures for which they are recommended.

### APPLICATIONS

BAHRAIN LUBRICANTS HEAT TRANSFER FLUID HTO are recommended for use in open and closed installations where the bulk oil temperature ranges are as outlined in the table below and where minimum shutdown temperatures are not below -7°C.

- Bulk Oil Temperature Ranges for BAHRAIN LUBRICANTS HTO Closed Systems (-7°C to 315 °C), Open Systems (-7°C to 180 °C)
- Closed, cold-oil sealed, indirect heating and cooling systems in all kinds of industrial processes operating at bulk oil temperatures up to the maximum temperatures quoted in the table above and at atmospheric pressure.
- Open systems provided the bulk temperatures do not exceed the maximum temperatures quoted in the table above.

### PROPERTIES

BAHRAIN LUBRICANTS HEAT TRANSFER FLUID HTO are thermally stable and are capable of an extremely long service life without deposit formation or viscosity increase. They demonstrate specific heats and thermal conductivities that provide more rapid heat dissipation. They have good heat transfer efficiency and their viscosities are such that they can be pumped readily at both start-up and operating temperatures.

### PRODUCT BENEFITS

- Performance and reliability, even in severe applications.
- High resistance to thermal cracking and decomposition
- Excellent thermal properties
- Good thermal and oxidative stability
- Improves operating efficiency of heat transfer system
- Maintains viscosity and film thickness at high temperatures to help protect equipment
- Freedom from sludge and coke deposits
- Good low temperature fluidity
- Product integrity assurance through independent verification

### RECOMMENDATIONS / SPECIFICATIONS

Meets or exceeds the requirements of: FDA 21 CFR 178.3570, DIN 51522 (1998 - 11), NSF H1, NSF HT1, Classified as ISO 6743-12 Family Q

### TYPICAL TECHNICAL PROPERTIES

BAHRAIN LUBRICANTS HTO	46	68
Product code	12571aIL	12571bIL
Density at 15 <sup>0</sup> C, g/ml, ASTM D4052	0.862	0.871
Kinematic Viscosity at 40 <sup>0</sup> C, mm <sup>2</sup> /s, ASTM D445	44.5	65.1
Kinematic Viscosity at 100 <sup>0</sup> C, mm <sup>2</sup> /s, ASTM D445	6.9	8.7
Flash Point(COC), °C, ASTM D92, (min)	222	224
Pour Point, °C, ASTM D97	-21	-21
Micro-carbon Residue, (Conradson), wt %, ASTMD4530,(max)	0.05	0.05
Copper Strip Corrosion, 3 hrs @ 100° C, ASTM D 130 1A	1A	1A

Note: These characteristics are typical of current production. While future production will conform to current specification, variations in these characteristics may occur.

ATL/PDS/IL/04B/1\*, 10.07.22, Page 1/1  
\* supersedes all previous versions

**Health and Safety:** Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contact office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing off used product, take care to protect the environment.