PRODUCT INFORMATION

NAVIGO Therm 5

Description

NAVIGO Therm 5 is a heat transfer oil produced from selected highly refined mineral oils with high levels of thermal stability, low vapour pressure and specific heat and thermal conductivity, designed for use in the liquid phase in closed heat transfer systems with forced circulation.

Application

NAVIGO Therm 5 is recommended for non-pressurised indirect heating systems. The normal operating temperature of bulk oil ranges from -10 to 320°C; however, the film temperature should not exceed 340°C.
After pressure testing the system for leaks and flushing it thoroughly with NAVIGO Therm 5 (never use water), the system should be drained completely and filled with fresh NAVIGO Therm 5 until the oil level in the expansion tank is at 40% of the level expected at operating temperature. The mineral oil expands when heated and the exposure to air must be minimised, especially at fluid temperatures above 50°C in the expansion tank. To minimise excessive oxidation of the oil it can be blanketed with inert gas, or a floating cover can be installed.

Features/Advantages and Benefits

- Excellent thermal stability
- Good heat transfer properties
- Low coking and residue formation
- Very good pumpability
- Maintains the necessary viscosity at running temperatures to minimise the risk of pump cavitation and wear
- Long service life

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is Registered & Licensed as a Free Zone Company under the Rules & Regulations of DMCCA

JBC 4 Tower, 15th Floor, Unit No. 1506
Jumeirah Lakes Towers
P.O. Box 487718
Dubai, United Arab Emirates

Tel: +971 4 43 00769
Fax: +917 4 797 6800
technical@lukoil.com

Typical Characteristics

Properties	Test Method	Data	Unit
Density at 15°C	ASTM D1298	870	kg/m^3
Flash point (PMC)	ASTM D93	195	°C
Flash point (COC)	ASTM D92	210	°C
Fire point	ASTM D92	260	°C
Autogenous ignition temperature	ASTM D2155	360	°C
Kinematic viscosity @ 40°C	ASTM D445	32	cSt
Kinematic viscosity @ 100 °C	ASTM D445	5.3	cSt
Pour point	ASTM D97	-12	°C
Neutralisation value	ASTM D974	<0.15	mgKOH/g
Ramsbottom Carbon	ASTM D524	0.03	%wt
Coefficient of thermal expansion		0.00077	1/K

Health and Safety

The Safety Data Sheet is available on request and describes the product in terms of safety in use, handling and transport. The product is not classified as dangerous according to the Regulations 1272/2008 and 1907/2006 or the Directive 1999/45/EC. When used as intended, this product does not pose significant health risks. Repeated exposure may cause skin dryness or cracking. In case of skin contact, immediately wash the affected area with plenty of soap and water. Remove contaminated clothes.

Handling and Packaging

The compatibility and miscibility with comparable products from other suppliers have been tested successfully by an independent institute. In order to benefit from full product performance, the mixing of lubricants should be limited to a minimum.

All packages should be stored under cover to avoid water ingress and the obliteration of drum markings. Products should not be stored above 60°C.

The product is available in bulk and drums of approximately 205 litres.

Further Information

For further information about LUKOIL Marine Lubricants please contact any representative of LUKOIL Marine Lubricants or visit our website www.lukoilmarine.com.

LUKOIL Marine Lubricants DMCC
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