



PRODUCT DESCRIPTION

LENOL Thermo LT 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 systems with forced circulation, where exceptional low temperature properties are required.

APPLICATIONS

LENOL Thermo LT is recommended for non-pressurised indirect heating or cooling systems. The low pour point ensures good circulation at low temperatures. The normal operating temperature of bulk oil ranges from -35 to 240°C; however, the film temperature should not exceed 250°C.

After pressure testing the system for leaks and flushing it thoroughly with LENOL Thermo LT (never use water), the system should be drained completely and filled with fresh LENOL Thermo LT 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.

ADVANTAGES

- Excellent thermal stability
- Good heat transfer properties
- Low coking and residue formation
- Very good pumpability
- Maximum film temperature of 250°C
- Long service life

TECHNICAL DATA

Properties	Test Method	Data	Unit
Density at 15°C	ASTM D1298	>835	kg/m ³
Flash point (PMC)	ASTM D93	175	°C
Flash point (COC)	ASTM D92	180	°C
Fire Point	ASTM D92	205	°C
Autogenous ignition temperature	ASTM D2155	300	°C
Kinematic viscosity at 40°C	ASTM D445	22	cSt
Kinematic viscosity at 100°C	ASTM D445	4.5	cSt
Pour point	ASTM D97	-45	°C
Neutralisation value	ASTM D974	<0.15	mgKOH/g
Ramsbottom Carbon	ASTM D524	0.02	%wt
Coefficient of thermal expansion		0.00077	1/K

HANDLING AND PACKAGING

Compatibility and miscibility with comparable products from other suppliers have been successfully tested by an independent institute, but to benefit from full product performance, the mixing of lubricants should be avoided.

HEALTH AND SAFETY

The information on this product is available in the Material Safety Data Sheet (MSDS) as a guide to the precautions and safe handling of this product and its disposal. The product is not classified as dangerous according to the Regulation 1272/2008 or the Directives D67/548/EEC and 1999/45/EC. When used as intended, this product does not pose significant health risks.

Last Updated: June 2022

This data sheet and the information given are considered to be accurate to the best of our knowledge. The physical and chemical characteristics are typical values and compliant to specification. Variations in these characteristics may occur. No warranty expressed or implied, is given as to the accuracy or completeness of the information or suitability of the products. LENOL shall not be responsible for any damage or injury resulting from abnormal use of the product. The user will be always responsible to evaluate and use products safely and to comply with all applicable laws and regulations.