

Product Description

Mobiltherm 605 is a high quality heat transfer medium made from solvent refined mineral oil. It gives outstanding performance in indirect heating installations operating at bulk oil temperatures up to 315°C.

Benefits

Mobiltherm 605 offers the following benefits:

- Highly resistant to thermal cracking and decomposition
- Excellent thermal stability reduces viscosity increase
- Low viscosity gives early start-up
- Non toxic in the event of leakage
- Good handling properties at low temperature
- Minimum heat transfer interference due to deposit formation
- Excellent thermal properties give improved operating efficiency
- Long trouble free service life giving improved operating profit

Applications

Mobiltherm 605 is recommended for use in indirect heating and cooling installations in all kinds of industrial processes operating at bulk oil temperatures up to 315°C.

The limitation of the upper temperature is based on the high temperature properties of Mobiltherm 605 at atmospheric pressure. If used above this level vapour lock may result unless the system is designed to operate at the higher temperature by pressurising with an inert gas, such as nitrogen.

At higher temperatures fluid life will be shortened because the rate of thermal degradation increases markedly as temperatures rise above the recommended limit. In well designed systems the temperature of the oil film surrounding the heating element will be about 15°C to 30°C above the bulk oil temperature. To ensure long service life and freedom from deposition of sludge and coke-like material, which interferes with heat transfer rates, the temperature of the oil film adjacent to the heater element should preferably not exceed 345°C.

Properties

The high thermal stability of Mobiltherm 605 will reduce the tendency towards viscosity increase in correctly designed indirect heating systems and prevent formation of deposits which interfere with efficient heat transfer operations. The viscosity has been selected to provide quick circulation at start-up and the Pour Point gives good handling properties at low temperatures.

The density of the product gives good thermal properties, specific heat and thermal conductivity. These features all help to reduce circulating pump power input and enable systems to be built with smaller bore piping, thus contributing to lower initial installation costs and increased operating efficiency.

Health and Safety

Based on available toxicological information, it has been determined that this product poses no significant health risk when used and handled properly.

Details on handling, as well as health and safety information, can be found in the Material Safety Data Bulletin which can be obtained through Mobil Oil Company Ltd., by telephoning 01372 22 2000.

Typical physical characteristics are given in the table. These are intended as a guide to industry and are not necessarily manufacturing or marketing specifications.

Product Characteristics

Mobiltherm 605

Relative Density 15/4 °C	0.874
Viscosity, cSt at 40°C	29.5
Viscosity, cSt at 100°C	5.0
Viscosity Index	100
Pour Point, °C max.	-6
Flash Point COC, °C min.	212
Colour - ASTM	2.5

Due to continual product research and development, the information contained herein is subject to change without notice

Mobil Oil Company Limited
Acting as Agent for Mobil Lubricants UK Limited
ExxonMobil House, Ermyn Way
Leatherhead, Surrey, KT22 8UX
Telephone: 01372 22 2000

