SINCE 1839
Schaeffer's
SPECIALIZED LUBRICANTS

TECHNICAL DATA

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ISO 9001 CERTIFIED

2813S SYNTHETIC HEAT TRANSFER OIL

Synthetic Heat Transfer Oil is a non-corrosive, non-fouling, synthetic heat transfer fluid formulated to provide fast and efficient heat transfer when used in open loop or closed system applications with expansion tank temperatures up to 600°F (315°C). Synthetic Heat Transfer Oil's operability temperature is from 20°F (-7°C) to a maximum film temperature of 600°F (315°C).

Synthetic Heat Transfer Oil is specifically designed for marine hot oil systems and asphalt barges.

Synthetic Heat Transfer Oil is blended from the finest select high viscosity index, synthetic base oils available to exhibit the following performance characteristics:

- **High Viscosity Index –** This results in a minimum change in viscosity over a broad temperature range.
- **High Thermal and Oxidative Stability –** This results in the product having resistance to cracking, carbon, sludge, varnish and lacquer formation during high temperature operation.
- **Low Volatility Characteristics –** The low volatility of paraffin base oils results in lower makeup requirements, eliminates vapor lock in circulating pumps and reduces the possibility of cavitation.
- **Flash and Fire Points Significantly Above 400°F (204°C) and Auto-Ignition Temperature Above 700°F (371°C).**

Synthetic Heat Transfer Oil also offers the following benefits:

- High thermal efficiency for rapid and efficient transfer of heat.
- Low vapor pressure at elevated temperatures and high boiling point to prevent pressure build-up.
- Non-corrosive to system parts.
- Excellent hydrolytic stability and resistance to emulsification with water.
- Excellent compatibility with other petroleum base heat transfer oils.
- Excellent compatibility with all types of seals, materials of construction and finishes commonly used in heat transfer systems.
- Non-fouling on degradation.
- Virtually odorless and essentially non-toxic.
- Long service life for proven trouble-free operation.

TYPICAL PROPERTIES

Specific Gravity 60°F	0.86
Viscosity cSt, @ 40°C (ASTM D445)	43.13
Viscosity cSt, @ 100°C (ASTM D445)	6.60
Viscosity Index (ASTM D2270)	104
Flash Point °F/°C (ASTM D92)	460°/237.8°
Auto-ignition Temperature °F/°C (Cool-flame)	703°/373°
Pour Point °F/°C (ASTM D97)	-11.2/-24
Total Acid No. (ASTM D664)	0.12
Copper Strip Corrosion Test (ASTM D-130)	1a
Noack Volatility (ASTM D5800) % Evaporation Loss @ 150°C	3.5
Conradson Carbon Residue (ASTM D189), % mass	0.000