CHEM GROUP

Thermaflo®

Thermaflo® Q

PRODUCT DESCRIPTION

Thermaflo® Q is a synthetic aromatic heat transfer fluid engineered for non-pressurized and low-pressure indirect heating systems where consistent, uniform process heat is essential. Its balanced formulation pairs thermal stability at elevated temperatures with exceptional flowability in cold conditions.

The fluid carries a bulk temperature range of −17°C to 330°C (0°F to 625°F) and a maximum film temperature of 357°C (675°F), while remaining pumpable to −45°C (−50°F). Low viscosity across the operating range — 4.5 cSt at 40°C falling to 1.7 cSt at 100°C — supports high film coefficients and efficient circulation.

BENEFITS

Superior Cold-Weather Performance

Pumpable to −45°C (−50°F) with a freeze point below −45°C, easing cold start-up concerns.

Wide Operating Temperature Range

Bulk service from −17°C to 330°C (0°F to 625°F) with a 357°C (675°F) maximum film temperature.

Improved Heat Transfer Efficiency

4.5 cSt at 40°C dropping to 1.7 cSt at 100°C — higher film coefficients allow more compact system designs.

System Compatibility

Non-corrosive to the common metals and alloys used in heat transfer equipment construction.

Extended Fluid Life

Thermally stable aromatic chemistry shipped at a total acid number below 0.05 mg KOH/g.

APPLICATIONS

Oil Refining & Gas

Oil & gas refining · LNG processing · topping units · offshore platforms

Chemicals & Pharmaceutical

Chemical processing · pharmaceutical manufacturing · biodiesel production

Plastics & Polymers

Polymer manufacturing (polystyrene, polyethylene) · asphalt processing

System Types

Indirect heating systems · heat recovery systems · non-pressurized and low-pressure loops

AVAILABILITY

55	275	Bulk
GALLON DRUMS	GALLON TOTES	DELIVERIES

Complimentary fluid analysis available for in-service samples. Contact us for current lead times and volume pricing.

(800) 489-2306
www.chemgroupus.com

PRODUCT DATA

PROPERTY	TEST METHOD	VALUE
Appearance	Visual	Colorless to pale yellow
Composition	–	Aromatic mixture
Moisture Content	–	< 200 ppm
Flash Point	COC	300°F (149°C)
Autoignition Temperature	ASTM D-2155	760°F (404°C)
Kinematic Viscosity @ 40°C	–	4.5 cSt
Kinematic Viscosity @ 100°C	–	1.7 cSt
Density @ 20°C	–	8.17 lbs/gal
Specific Gravity @ 20°C	–	0.980
Freeze Point	–	< −50°F (< −45°C)
Pumpability Limit (KV = 400 cSt)	–	−50°F (−45°C)
Boiling Range @ 760 mmHg	–	550°F – 600°F (288°C – 316°C)
Bulk Temperature Range	–	0°F – 625°F (−17°C – 330°C)
Maximum Film Temperature	–	675°F (357°C)
Total Acid Number, Max	–	< 0.05 mg KOH/g
Thermal Conductivity @ 600°F (316°C)	–	0.045 BTU/ft/hr
Vapor Pressure @ 600°F (316°C)	–	35 psi
Average Molecular Mass	–	275

SYSTEM NOTES

Thermaflo® Q is intended for indirect heating service in non-pressurized and low-pressure closed loops. Vapor pressure is 35 psi at 316°C (600°F), so expansion and relief provisions should be sized for the intended operating temperature.

Keep moisture below 200 ppm and monitor total acid number to track fluid condition in service. Confirm compatibility with the existing charge before changeover.

SAFETY

Thermaflo® Q is combustible, with a COC flash point of 149°C (300°F) and an autoignition temperature of 404°C (760°F). Keep away from heat sources, sparks, and open flames, and avoid contact with hot surfaces above the

Consult the current Safety Data Sheet for complete hazard information, exposure limits, first aid measures, personal protective equipment, and handling precautions prior to use.

Thermaflo® is a registered trademark of CHEM Group. The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of CHEM Group and its subsidiaries. It is the responsibility of the user to comply with applicable laws and regulations and to provide for a safe workplace.

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