CHEM GROUP

Thermaflo®

Thermaflo® G

PRODUCT DESCRIPTION

Thermaflo® G is a recycled synthetic heat transfer fluid engineered for liquid-phase, low-pressure heat transfer systems. It consists of a diaryl and triaryl aromatic mixture — synthetic organic compounds with two- and three-ring aromatic structures that deliver thermal stability and heat transfer performance.

The fluid carries a bulk temperature range of −7°C to 357°C (20°F to 675°F) and a maximum film temperature of 371°C (700°F), making it an economical solution for hot oil systems already charged with similar di- and tri-aryl heat transfer fluids.

BENEFITS

Wide Operating Temperature Range

Bulk service from −7°C to 357°C (20°F to 675°F) with a 371°C (700°F) maximum film temperature.

Long Fluid Life

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

Low Operating Pressure

Built for liquid-phase, low-pressure systems — 24 psi vapor pressure at 316°C (600°F).

Low Freeze Point

Freezes below 4°C (40°F), reducing the need for heat tracing in many installations.

Excellent Heat Transfer

12.3 cSt at 40°C dropping to 1.8 cSt at 100°C, with 0.053 BTU/ft/hr thermal conductivity at 600°F.

APPLICATIONS

Oil Refining & Gas

Gas to liquid · gas treatment · distillation

Chemicals & Petrochemical

Formaldehyde · resins · adhesives · specialty and batch chemical production · fine chemicals

Energy & Renewables

Solar power · biodiesel production · bioalcohol production

Materials Processing

Synthetic fiber processing · industrial film

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	Yellow to amber
Composition	–	Aromatic mixture (diaryl / triaryl)
Moisture Content	–	< 200 ppm
Flash Point	COC	> 245°F (> 118°C)
Autoignition Temperature	ASTM D-2155	> 810°F (> 432°C)
Kinematic Viscosity @ 40°C	–	12.3 cSt
Kinematic Viscosity @ 100°C	–	1.8 cSt
Density @ 20°C	–	8.71 lbs/gal
Specific Gravity @ 20°C	–	1.046
Freeze Point	–	< 40°F (< 4°C)
Boiling Range @ 760 mmHg	–	540°F – 560°F (282°C – 293°C)
Bulk Temperature Range	–	20°F – 675°F (–7°C – 357°C)
Maximum Film Temperature	–	700°F (371°C)
Total Acid Number, Max	–	< 0.05 mg KOH/g
Thermal Conductivity @ 600°F (316°C)	–	0.053 BTU/ft/hr
Vapor Pressure @ 600°F (316°C)	–	24 psi
Average Molecular Mass	–	205

HANDLING & STORAGE

Thermaflo® G is intended for liquid-phase service in closed, low-pressure systems. Vapor pressure is 24 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. The fluid is miscible with similar di- and tri-aryl heat transfer fluids; confirm compatibility with the existing charge before changeover.

SAFETY

Thermaflo® G is combustible, with a COC flash point above 118°C and an autoignition temperature above 432°C. Keep away from heat sources, sparks, and open flames, and avoid contact with hot surfaces above the flash point.

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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