



PG-1 HIGH HEAT TRANSFER FLUID

Item #105578 / Item #106519

INSTRUCTION MANUAL



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DESCRIPTION

PG-1 is our ultimate nontoxic heat transfer fluid for high-heat plastics molding. PG-1 allows use of smaller pumps, which cost less to purchase, rebuild, maintain and operate. IMS PG-1 is a pharmaceutical/food additive grade mineral oil especially formulated to specifications for a wide range of high temperature heat transfer duties.

PG-1 Heat Transfer Fluid, from a central heater source, can be applied to serve multiple hot injection mold applications. System cleanliness, stability, pumpability, compatibility with heat transfer hardware, low system operation pressures, and total cost savings are important performance features of IMS PG-1 – the ultimate NON-TOXIC heat transfer fluid for use in high-heat plastics molding.

FEATURES

- * Non-Toxic – certified for BOTH FDA (21 CFR 172.878) and USDA requirements for service with food and pharmaceuticals. Contains no PCB's or MCB's.
- * OSHA, DOT, WHMIS: not regulated
- * Colorless, odorless and tasteless
- * Non-corrosive, stable, non-carbonizing
- * Non-fouling, carbon granules stay in suspension and will not build up deposits
- * High flash and flammability points
 - *Excellent heat transfer and flow
- * Excellent BTU/GPM rate
- * Low pumping HP – allows use of smaller pumps, which cost less to buy, rebuild, maintain and especially operate
- * Non-irritating to skin
- * Insoluble (won't mix) with water
- * Disposal by local motor oil recyclers or approved landfill

PHYSICAL CHARACTERISTICS

Pour Point, ASTM D97.....-40° F (-40° C)
Density @ 75° F (24° C).....7.25 lb/gal
Specific Heat at 75° F.....0.452 BTU/lb ° F
Specific Heat at 400° F.....0.609 BTU/lb ° F
Flash Point, coc, ASTM D92 340° F (171° C)
Fire Point, coc ASTM D92 385° F (196° C)
Auto ignition Temperature
ASTM D2155 690° F (366° C)
Atmospheric Boiling Point
(Initial) ASTM D1160 657° F (347° C)
Average Molecular Weight350
Optimum Use Range..... 150° F to 600° F
.....(66° C to 316° C)
Pumpable, Centrifugal
@ 2000 centipoise.....-13° F (-25° C)

<p>CAUTION: Avoid mixing water or any other fluid with high-heat fluids.</p>

TIPS FOR USE OF PG-1 HIGH-HEAT TRANSFER FLUID

DON'T MIX FLUIDS! The chemistry of mixing fluids is so complex and unpredictable that we recommend you play it safe and not mix fluids.

KEEP IT DRY! Water in a hot oil system will cause severe pump cavitation above 212° F and may ruin pump seals and bearings. Water trapped in a dead leg and hit by high temperature oil can literally blow up piping. Drain the old fluid and have the system professionally cleaned. If an aqueous cleaning solution is used, make sure the system is thoroughly flushed, drained, and dried.

WINTER DELIVERIES! Drums of fluid delivered in cold weather can pose a problem, especially if they had a long, bumpy truck ride enroute. The agitation of cold, viscous fluid can entrain a lot of air and cause pump cavitation. Store the drums in a warm room, or better yet, put drum warmers on them for a while before pumping the fluid into the system.