Thermal Trans

Synthetic Blend Heat Transfer Fluid
No. 610

ISO 22, 32, 46, 68

DESCRIPTION:

Thermal Trans Heat Transfer Fluid offers the process industry a versatile, practically nontoxic heat transfer fluid proven to be cost effective and thermally stable at temperatures up to +600°F (310°C). Unlike less stable mineral oils, **Thermal Trans** has demonstrated excellent performance over a wide range of temperatures without compromising system reliability or integrity. **Thermal Trans** was designed to meet the tough thermal demands placed on high temperature heat transfer mediums. The synthetic blend formula is well suited to combat the problems of carbon formation on heated surfaces.

APPLICATION:

Thermal Trans is recommended for use in liquid phase heat transfer systems operating continuously at bulk temperatures up to 600°F (310°C). Typical applications include temperature control units used in plastic extrusion, plastic molding, and metal die-casting operations. **Thermal Trans** is recommended for heat transfer systems typically found in:

- Asphalt and coal tar storage, transport, and compounding
- Dyes, chemicals, and pharmaceuticals manufacture
- Lumber drying
- Paper and paperboard production
- Petroleum products processing
- Plywood laminating
- Rubber and plastics molding, extrusion, curing, and calendering
- Sheet metal laminating
- Solar energy heat transfer and storage
- Textiles (hot calendering)
- Tiles, linoleum, and roofing products
- Varnish and resins manufacture

OUTSTANDING FEATURES:

- Long fluid life
- Superior oxidation control and protection against thermal cracking
- Excellent deposit control and resistance to sludging
- High-thermal conductivity
- Subzero pour points
- Excellent low-temperature fluidity
- Low odor
- Non-corrosive to aluminum, steel, copper, brass, or bronze
- Low vapor pressure

NOTE:

Cooper and cooper alloys should not be used in heat transfer systems with a hydrocarbon fluid unless air is excluded from contact with the fluid by means of heretic sealing or an inert gas blanket.

PHYSICAL PROPERTIES:

ISO Grade	**22**	**32**	**46**	**68**
Operating Temperature Range	-50 to 550°F	-30 to 615°F	-10 to 625°F	-10 to 665°F
Viscosity				
@ 40°C, cSt	21.8	32.5	45	67.7
@ 100°C, cSt	4.95	5.6	6.8	8.8
Flash Point, ºF	419	424	464	500
Fire Point, ºF (ºC)	360 (182)	480 (249)	500 (260)	520 (271)
Autoignition				
Temperature, ºF (ºC)	642 (339)	648 (342)	650 (343)	670 (354)
Pour Point, ºF (ºC)	0 (-18)	-44 (-42)	-100 (-73)	-90 (-68)
Viscosity Index	160.7	115.5	137	107

Values shown here are typical, and may vary.