DURALIFE® DA SYNTHETIC HEAT TRANSFER FLUID

Duralife® DA Synthetic Heat Transfer fluid is a high-temperature synthetic heat transfer fluid based on Diaryl Alkyl and oxidation inhibitors to enhance high temperature performance and stability. It has low vapor pressure, high specific heat and high thermal conductivity.

Duralife® DA Synthetic Heat Transfer fluid can be used to a maximum bulk temperature of 350 ºC (660ºF) and a maximum film temperature of 375 ºC (710ºF)

BENEFITS:

- Excellent thermal stability and resistance to oxidation and thermal cracking at high temperatures, hence avoiding the formation of oxidation sludge which may affect efficient heat transfer. This stability minimizes problems resulting from accidental overheating caused by flame impingement, improper heater firing, or inadequate circulation.
- Degrades primary to low molecular weight products – no build-up of high molecular weight products that must be removed from the system.
- Good demulsibility and air-separation performance, thus ensuring proper operation of the heat transfer unit, by preventing the formation of steam and air bubbles at hottest points.
- With a low pour point, it has good pump-ability in cold weather start-up, thereby providing good circulation and diminishing the likelihood of hot spots.
- High specific heat and thermal conductivity coupled with a suitable viscosity enable it to conduct and distribute large amount of heat efficiently.
- Can be use in non-pressurized, liquid phase systems.

TYPICAL CHARACTERISTICS

Test	Method	Typical Result
		DAHT 32
ISO Viscosity Grade		32
Specific Gravity @ 15ºC (60ºF)	ASTM D1298	1.02
Viscosity@ 40ºC, cSt	ASTM D445	30.5
Flash Point, PMCC, ºC (ºF)	ASTM D93	194(381)
Fire Point, COC, ºC (ºF)	ISO 2592	206(403)
Boiling Point, ºC (ºF)		353(667)
Auto-ignition Temperature, ºC (ºF)	ASTM E 659	385(725)
Thermal Conductivity @ 200 ºC,W/m	ASTM D 1160	0.105
Heat of Combustion, kJ/kg (Btu/lb)		40194(17251)
Molecular Weight (average), g/mol		236.4
Operating temperature, ºC (ºF)		-20(-4) to 350(660)
Vapor Pressure, @ 150ºC (302 ºF), psi (bar) @ 200ºC (392 ºF), psi (bar) @ 300ºC (572 ºF), psi (bar) @ 370ºC (698 ºF), psi (bar)		 0.02 (0.0014) 0.22 (0.0152) 4.60 (0.3172) 20.70 (1.4272)

The above characteristics are average values based on recent production. Minor variations which do not affect product performance are to be expected in normal manufacture.

WARNING:
Continuous contact with used oil has caused skin cancer in animal tests. Avoid prolonged contact. Thoroughly wash exposed areas with soap and water. Keep out of reach of children. Don't pollute. Conserve resources. Return used oil and bottle to collection centers.

Reference SDS Number 12142 database on our website at www.amtecol.com OR scan the code for a direct link