



TECHNICAL DATA SHEET

TOTAL SERIOLA 2510: HEAT TRANSFER FLUID

SERIOLA 2510 is a high quality white mineral oil possessing low vapor pressure and is selected for its high degrees of thermal stability, specifically heat and thermal conductivity. In a well-designed and properly operated system, **SERIOLA 2510** can be expected to give years of trouble-free service.

APPLICATIONS

SERIOLA 2510 oils were designed for non-pressurized, closed liquid phase heating systems operating at bulk fluid temperatures up to 325°C. Open systems (those in which the oil in the expansion tank is exposed to air) are generally more severe and place more stress on the oil than do closed systems. Similarly, systems with wide variations in temperature are also more stressful to the oil. For maximum efficiency, all heat transfer should be used under conditions of turbulent flow, minimizing skin temperatures, and reducing thermal stress on the fluid.

Because so many system design and operating parameters can affect the service life of the heat transfer oil, it is hard to predict oil life in any specific system. Since we have many years of experience with this fluid in various systems, we are able estimate its useful life and provide technical support. However, it is important to evaluate the condition of the oil on a regular basis.

FEATURES

- Narrow cut low volatility base oil
- Versatility: one fluid for all systems
- Low vapor pressure
- High specific heat
- Excellent thermal stability
- Long service life

ADVANTAGES

- Prevents pressure build-up and minimizes cavitation
- Minimizes inventory cost
- Little evaporation loss, constant pressure
- Ensure high thermal efficiency
- Resists thermal crackdown and breakdown
- Minimize long-term cost

PROPERTY	TEST ASTM	SERIOLA 2510
Product code	-	845
Viscosity in cSt at 40°C	D445	51.2
Viscosity in cSt at 100°C	D445	7.08
Viscosity SUS at 100°F	D2161	260
API gravity at 15°C in Kg/dm ³	D287	31.5
Index of Viscosity	D2270	95+
Flash Point in °C	D92	238
Pour Point in °C	D97	-15
TAN in mg KOH/g	D664	0.01
Carbon Residue in %	D189	0.01
Copper strip corrosion test, 3 hours; 100°C	D130	N° 1
Coefficient of thermal expansion per °C	-	0.00077
Aniline Point °C	D611	105
Relative Density	D1250	0.870
60°F		0.840
150°F		0.790
300°F		0.750
400°F		0.712
500°F		0.663
600°F		
Thermal conductivity in BTU/ FT ² / °F	-	0.0746
150°F		0.0709
300°F		0.0680
400°F		0.0662
500°F		0.0640
600°F		
Specific heat in BTU / lb / °F	-	0.515
150°F		0.593
300°F		0.649
400°F		0.703
500°F		0.761
600°F		
Vapor pressure in mm Hg	-	0.0200
300°F		2.0
450°F		45.0
600°F		
Initial distillation point, °F	D2887	632
10%		793
20%		814
40%		839
60%		859
80%		881
Final	976	

REMARK: Although the preceding values are typical properties, they do not represent guaranteed characteristics.