

# UNION ENERGY HEAT TRANSFER OIL

## Product Description:

UNION ENERGY HEAT TRANSFER OIL is blended using highly refined hydro-treated based oil and oxidation inhibitors for enhanced high temperature stability and performance to give outstanding service in a variety of applications. UNION ENERGY HEAT TRANSFER OIL have high resistant against oxidation and high temperature degradation, giving it a long usable life and minimizing deposit formation that can inhibit efficient heat transfer.

UNION ENERGY HEAT TRANSFER OIL may be used in both open and inert gas blanketed close heat transfer systems. The maximum temperature for use in an open system shall not exceed 150°C at the point where the oil is exposed to the air. In closed, inert gas blanketed systems, UNION ENERGY HEAT TRANSFER OIL can be used up to 320°C.

## Applications / Benefits:

- ▣ Produced using high VI hydro-treated base oils.
- ▣ Formulated using high temperature oxidation inhibitors.
- ▣ Minimal formation of deposit.
- ▣ Long fluid life.

## Typical Characteristics:

Test Description	Method	22	32	46	68	100
ISO Viscosity Grade	-					
Specific Gravity @ 15 °C	ASTM D 4052	0.854	0.863	0.869	0.872	0.873
Flash Point, °C	ASTM D 92	210	220	225	228	238
Pour Point, °C	ASTM D 97	-24	-24	-21	-18	-18
Kinematic Viscosity, cSt @ 40°C	ASTM D 445	22	32	46	68	100
cSt @ 100°C	ASTM D 445	4.47	5.34	6.69	8.61	11.3
Viscosity Index	ASTM D 2270	115	98	97	97	98
Color	ASTM D 1500	<0.5	<0.5	<0.5	<0.5	<0.5
Coefficient of Thermal Expansion	per °C	0.0074	0.00076	0.00077	0.00078	0.00079

### Specific Heat Capacity

Temperature, °C	25	100	150	200	250	300
ISO 22 Specific Heat Capacity, kJ/kg·°C	1.82	2.08	2.21	2.49	2.73	2.91
ISO 32 Specific Heat Capacity, kJ/kg·°C	1.89	2.17	2.33	2.51	2.72	2.88
ISO 46 Specific Heat Capacity, kJ/kg·°C	1.95	2.21	2.36	2.52	2.7	2.87
ISO 68 Specific Heat Capacity, kJ/kg·°C	1.97	2.24	2.41	2.53	2.67	2.85
ISO 100 Specific Heat Capacity, kJ/kg·°C	1.99	2.27	2.45	2.55	2.65	2.82

Max. Film Temperature, °C	340
Max. Bulk Temperature, °C	320

### Union Energy Mozambique, Lda Nnit:

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