



ISO-9001 Registered Quality System.  
ISO-21469 Compliant.

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## PRODUCT DATA

# LUBRIPLATE HTO SPECIAL

\*NSF International H-1 & HT1 Registered

## DESCRIPTION

LUBRIPLATE HTO SPECIAL is highly refined mineral-oil based heat transfer fluid designed for use up to 600F(316C) in closed-loop systems. LUBRIPLATE HTO Special's low pour point provides easy start up in cold environments. Lubriplate HTO Special is also formulated with oxidation inhibitors, corrosion inhibitors and metal deactivators not found in most heat transfer fluids of this type; resulting in much longer oil life. This is demonstrated in this ASTM D2440 test run by an independent laboratory.

## APPLICATIONS

Lubriplate HTO Special is ideal for closed-loop heat transfer thermal fluid systems commonly found in:

- ⇨ Food processing
- ⇨ Textile processing
- ⇨ Plastic and rubber manufacturing
- ⇨ Paper production
- ⇨ Asphalt production
- ⇨ Refineries
- ⇨ Laundries
- ⇨ Roofing

## ADVANTAGES

- ⇨ Excellent thermal stability and low volatility providing longer service life.
- ⇨ 600F(316C) maximum operating temperature.
- ⇨ 650F(343C) maximum film temperature.
- ⇨ Low viscosity and pour point for easy start up.
- ⇨ NSF H1, HT1 Food Grade Registered.
- ⇨ Environmentally friendly, non-toxic/non-hazardous.
- ⇨ Includes Lubriplate's free fluid analysis program.

## PACKAGING AVAILABLE

55 Gallon Drum

275 Gallon Passport Bin

**\*NSF International H-1/HT1 Registration No.**  
(Meets former USDA 1998 Guidelines)

## Part No.

L0748-062

L0748-072

**158929**

\*Registered H-1/HT1 by NSF International for use in food processing facilities as a lubricant or anti-rust agent on equipment in which there may be incidental contact involving the lubricated part and the edible product.



## THERMAL PROPERTIES

Thermal Expansion Coefficient	0.1016%/°C	0.0564%/°F
Thermal Conductivity	W/m K	BTU/hr F ft
38°C/100°F	0.128	0.074
260°C/500°F	0.107	0.062
316°C/600°F	0.104	0.060
Heat Capacity	kJ/kg K	BTU/lb F
38°C/100°F	1.938	0.463
260°C/500°F	2.960	0.707
316°C/600°F	3.215	0.768

## PHYSICAL PROPERTIES

Appearance: Clear and bright liquid		
Viscosity - ASTM D445		
cSt at 40°C/104°F	20.06	
cSt at 100°C/212°F	5.45	
cSt at 315°C/600°F	0.45	
Density - ASTM D1298	kg/m3	lb/ft3
38°C/100°F	838.41	52.34
260°C/500°F	698.59	43.62
316°C/600°F	663.81	41.44
Vapor Pressure - ASTM D2879	kPa	psi
38°C/100°F	0.00	0.00
260°C/500°F	5.60	0.81
316°C/600°F	22.26	3.28
Distillation Range - ASTM D2887	10%	344°C(651°F)
	90%	527°C(870°F)
Average Molecular Weight	364	

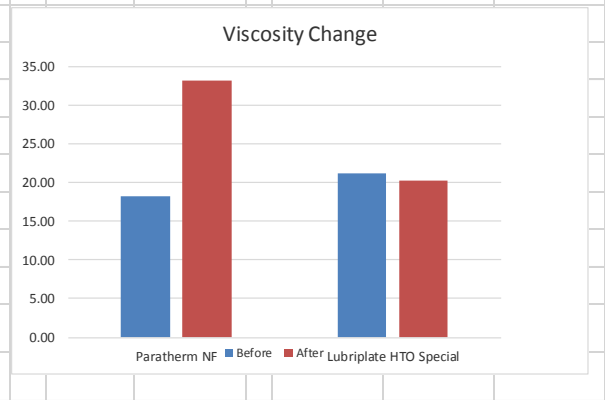
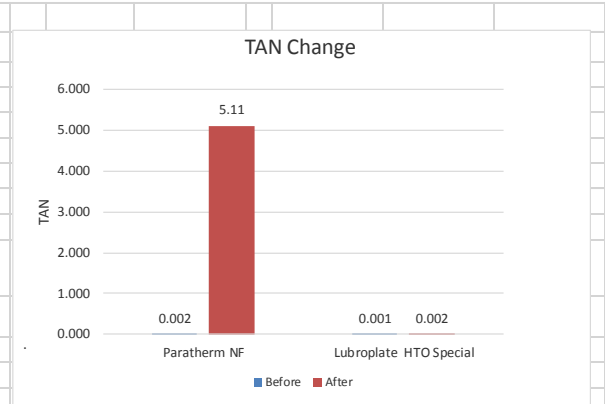
## TEMPERATURE RATINGS

Maximum Bulk/Use Temp	315°C/600°F
Maximum Film Temp	343°C/650°F
Pour Point - ASTM D97	-42°C/-43°F

## SAFETY DATA

Flash Point - ASTM D93	186°C/368°F
Flash Point - ASTM D92	213°C/415°F
Fire Point - ASTM D92	255°C/437°F
Autoignition - ASTM E-659-78	355°C/671°F

ASTM D2440	Lab No.	11519 - 1	11519 - 2
Sample ID		Paratherm NF Lot # 1948791	Lubroplate HTO Special
Tests	Method ASTM	Results	
1. Initial Acid no. mgKOH/g	D974	0.002	0.001
2. Final Acid no. mgKOH/g	D974	5.11	0.002
3. Sludge content after, % wt.	D2440	0.010	<0.001
4. Initial viscosity cst @ 40°C	D2145	18.26	21.19
5. Final viscosity cst @ 40°C	D445	33.20	20.25
6. Initial wt. of sample used (g)		37.64	35.23
7. Final wt. of sample After (g)		37.92	35.22
8. Weight loss after 120 hours (g)		+0.28	-0.01



Temperature (°F)	Density (lb/ft <sup>3</sup> )	Kinematic Viscosity (Centistoke)	Dynamic Viscosity (Centipoise)	Thermal Conductivity (BTU/hr•F°•ft)	Heat Capacity (BTU/lb•F°)	Vapor Pressure (psia)
-20	54.95	1954.13	1719.88	0.077	0.391	0.00
10	54.30	440.73	383.28	0.076	0.408	0.00
100	52.34	21.26	17.82	0.074	0.463	0.00
200	50.16	6.17	4.96	0.071	0.524	0.00
300	47.98	2.48	1.91	0.068	0.585	0.02
400	45.80	1.23	0.91	0.065	0.646	0.15
500	43.62	0.71	0.50	0.062	0.707	0.81
600	41.44	0.45	0.30	0.060	0.768	3.28