



## LUBRITA THERM SYN 400 (SYNTHETIC BASE THERMIC FLUID)

### DESCRIPTION

**Lubrita Therm Syn 400** is synthetic mineral base high temperature heat transfer fluid. It is fortified with selected chemical additives, which provide excellent thermal and oxidation stability to ensure longer life. This oil has quiet low freezing point (**below -15°C**), which ensures good pump ability at low temperatures and smooth operations. Its low volatility reduces oil consumption during service. Due to special AFR (anti free radical) and minimum low boilers formation characteristics, **Lubrita Therm Syn 400** has more life than conventional mineral base heat transfer oils. They are non-toxic and exhibit excellent resistances to thermal cracking and oxidation. The high heat content and high thermal conductivity facilitates rapid heating and efficient operation of the heat transfer system. The heat transfer fluid is to be used in systems with forced circulation. **Lubrita Therm Syn 400** has wide operating range of **-2°C to 320°C** and in extreme cases upto **332°C**. Unlike normal Mineral base products, it does not crack at high temperature forming carbon deposits and insoluble matter. Negligible deposits means better heat transfer rate. Insoluble matter/sludge is kept in fine dispersion, which increases the overall life of oil.

### APPLICATIONS

- **Closed Loop System with maximum bulk temperature of 332°C.**
- It has a wide range of application in pharmaceuticals, textile, chemical, plywood and other processing industries, where there is indirect heating in an enclosed system.

### PERFORMAMCE ADVANTAGES:

1. **Resistance against Fluid Degradation:** Contributes to Long Life at very high temperatures
2. **Low varnishing Tendencies:** Allows for clean operation and great thermal transfer efficiency.
3. **Low Volatility:** Improve safety and decreases possibility of pump cavitation.
4. **Cost Efficient Oil:** Overall reliable, cost effective performance even on continuous running.
5. **Easy Disposable:** Can be disposed on mineral oil recycling services.
6. **Non Corrosive.**
7. **Non Toxic.**
8. **Minimal Odor**

### SPECIFICATION:

SL NO	TEST PARAMETERS	METHOD	LUBRITA THERM SYN 400
1	Appearance	VISUAL	Clear & Bright
2	Crackle Test	ASTM D 93	Nil
3	Density @ 29.5°C	ASTM D 1298	0.828
4	Kinematic Viscosity @ 40°C, cSt	ASTM D 445	32
5	Kinematic Viscosity @ 100°C, cSt	ASTM D 445	6
6	Flash Point, °C	ASTM D 92	235
7	Coefficient of Thermal Expansion/°C , @ 15°C	-----	0.00076/ °C



8	Viscosity Index	ASTM D 2270	132
9	Total Acid No, mg KOH/g	ASTM D 664	0.04
10	Copper Corrosion Test, @ 100°C for 3 hrs.	ASTM D 130	1A
11	CCR% Mass	ASTM D 189	<0.01
12	Sulphated Ash,%	ASTM D 875	0.004
13	Specific Heat @ 15°C	kJ/Kg °C	1.92
14	Thermal Conductivity @ 15°C	W/m °C	0.12
15	RPVOT TEST, mins	ASTM D 2271	>1000
16	Pour Point °C	ASTM D 97	-18
17	Fire Point min °C	ASTM D 92	265
18	Auto Ignition Temperature °C	ASTM G 72	380
19	Initial Boiling Point(IBP), min °C	ASTM D 2892	365
20	Final Boiling Point(FBP), min °C	ASTM D 2892	440
21	Maximum Film temperature °C	-----	354
22	Maximum Bulk temperature °C	-----	332

## HANDLING, HEALTH AND SAFETY

Lubricant consisting of highly refined mineral oils with specific additives. In normal conditions of use this lubricant presents no particular toxic hazard. All lubricants, of any kind should be handled with great care, particularly avoiding any contact with the skin.

Prevent any splashing and keep away from combustible materials. Store under cover and away from any risk of pollution. Disposes off the used oil correctly, don't pour down drains, into watercourses or the soil.