



# GLOBALSYNTH

GLOBALSYNTH LUBRICANTS PVT LTD

An ISO 9001 : 2015 CERTIFIED COMPANY

Heat Transfer Fluid Speciality Expert

CIN - U23209DL2021PTC382265



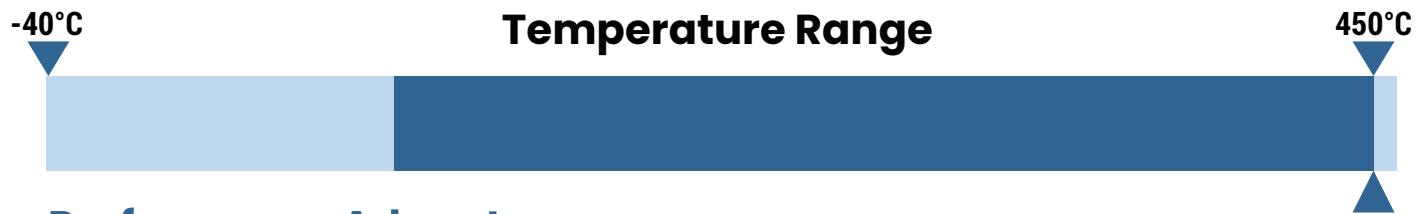
# GLOBALSYNTH HT 450

## High Temperature Synthetic Heat Transfer Fluid

GLOBALSYNTH HT 450 heat transfer fluid is a highly stable, long-lasting silicone fluid designed for high temperature liquid phase operation. It exhibits low potential for fouling and can often remain in service for 5 years or more.

### Application

- Systems required to operate up to 450°C
- Closed systems with a maximum bulk temperature of 450°C
- Solar energy / CSP
- Chemical Processing
- Pharmaceutical
- Oil & Gas



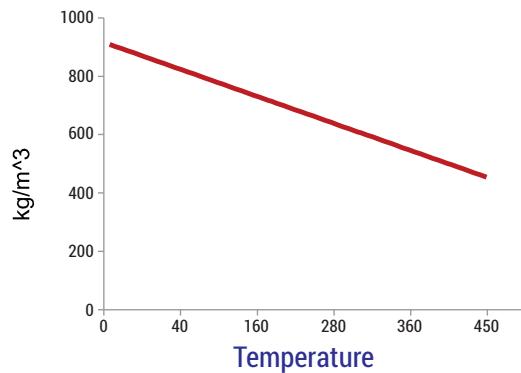
### Performance Advantages

- Highly Stable for maximum bulk temperature upto 450°.
- Resistant against fluid degradation Contributes to extended fluid life.
- Low varnishing tendencies Allows for clean operation and greater thermal transfer efficiency.
- Easy disposal Can be disposed using standard oil recycling services.
- Low volatility Improves safety and decreases possibility of pump cavitations.
- Minimal odor.

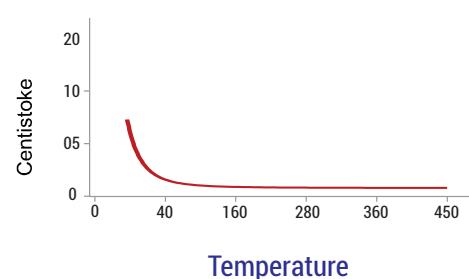


Typical Properties	GlobalSynth HT 450
Kinematic Viscosity cSt @ 40° C	5.74
Minimum Temperature, °C	-40
Maximum Film Temperature, °C	480
Maximum Bulk Temperature, °C	450
Pour Point, °C	-60
Flash Point, °C ASTM D92	185
Fire Point, °C ASTM D92	225
Autoignition Point, °C ASTM D-2155	500
Thermal Expansion Coefficient, %/°C	0.00078
Thermal Conductivity @ 40°C, W/m-K	0.1463
Thermal Conductivity @ 450 °C, W/m-K	0.0851
Heat Capacity @ 40°C, kJ/kg-K	1.506
Heat Capacity @ 450°C, kJ/kg-K	2.162
Moisture	Nil

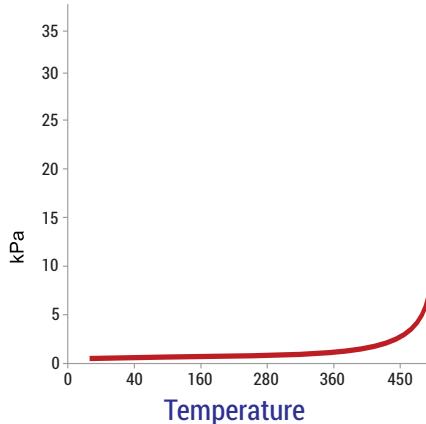
## Density



## Kinematic Viscosity



## Vapor Pressure



## GLOBALSYNTH HT 450 – Engineering Properties :

Temperature (°C)	Density (kg/m³)	Kinematic Viscosity (Centistoke)	Thermal Conductivity (W/m-K)	Heat Capacity (kJ/kg-K)	Vapor Pressure (kpa)
40	932	5.74	0.1463	1.506	0.00
80	915	2.23	0.1398	1.574	0.00
120	900	1.21	0.1322	1.643	0.00
160	885	0.78	0.1260	1.698	0.00
200	865	0.54	0.1237	1.711	1.56
240	840	0.40	0.1162	1.779	5.20
280	810	0.31	0.1087	1.847	10.45
320	770	0.25	0.1012	1.916	15.82
360	735	0.21	0.0951	1.972	20.45
400	695	0.15	0.0920	2.010	25.74
450	648	0.10	0.0851	2.162	32.48

**Note:** The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This edition supersedes all previous edition and information contained within them. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product. Abbreviations: OC, open cup test; and NTR, no test reported.



**GLOBALSYNTH**  
GLOBALSYNTH LUBRICANTS PVT LTD

**📍 Registered Office :**

F-23/1, G/F Gali No. 23, Krishna Nagar,  
Near. Rastogi Community Hall, Delhi,  
East Delhi - 110 051.

**📍 Corporate Office :**

514, 5th Floor, SAKAR EAST COMPLEX, Opp. Bansal Mall,  
B/S. Shilp Residency, Soma Talav, Tarsali,  
40Mtr. Ring Road, Tarsali, Vadodara - 390 009.

**📞 +91 84488 57372 | 84488 37372**

**🌐 www.globalsynth.in**

**✉️ globalsynths@gmail.com | info@globalsynth.in  
customercare@globalsynth.in**

**Our Dealer :**