

High Temperature Silicone Heat Transfer Fluid

Process Applications

- High temperature applications
- Open baths
- Quenching tanks
- Hydraulic & mechanical equipment
- Pharmaceutical
- Process heating & cooling

■ Dynalene 600 Overview

Dynalene 600 is a silicone-based heat transfer fluid with exceptional thermal stability and resistance to oxidation. It is engineered to maintain consistently high thermo-physical properties in the most hostile high temperature applications such as open fluid baths and process heating and cooling applications.

Dynalene 600 is environmentally friendly with a high benchmark for operational safety by exhibiting an open-cup flash point of 315°C (600°F). When premium performance is a minimum requirement, select Dynalene 600 as your fluid of choice.

■ Thermal Stability

The maximum operating temperature of Dynalene 600 is 550°F. Dynalene 600 provides uniform performance under shear over a wide temperature range and shows excellent resistance to viscosity breakdown at high temperatures.

Weight Loss at 249°C (480°F)

After 4 hours.....	2.0%
After 24 hours.....	4.5%
After 48 hours.....	7.0%

Weight Loss at 288°C (550°F)

After 4 hours.....	3.0%
After 24 hours.....	9.4%
After 48 hours.....	11.5%

Gel Time

At 199°C (390°F).....	>19,000 hours
At 288°C (550°F).....	>5, 000 hours

Recommended Temperature Range:

70°C (158°F) to 288°C (550°F)

■ Properties of Dynalene 600

A comprehensive list of all thermo-physical properties of Dynalene 600 can be found on page 2. For health and safety information or to request a Material Safety Data Sheet, contact our Dynalene sales representatives.

Composition:	Dimethylpolysiloxane
Appearance:	Dark brown, orange
Odor:	None

Pour Point:	<-65°C (<-85°F)
Initial Boiling Point:	>315°C (>600°F)
Flash Point:	315°C (600°F)

■ Benefits of Choosing Dynalene 600

- Low oral toxicity
- High thermal stability
- High flash point
- Odorless
- Easy pumping
- Cost-effective
- Available throughout North America
- Total fluid care
- Proven performance

■ Dynalene's Fluid Care Program

Coupling our Dynalene fluids with a fluid care program can extend the life of your systems significantly. It offers yearly testing of the heat transfer fluid in your system and tracks the changes in the fluid year to year so adjustments can be made to keep your systems working at its best.

US Units

Temperature °F	Viscosity cP	Thermal Cond. BTU/hr-ft·°F	Specific Heat BTU/lb·°F	Density lb/ft ³
158	48.6	0.0853	0.327	56.9
160	47.7	0.0852	0.327	56.8
180	40.4	0.0841	0.332	56.1
200	34.5	0.0829	0.337	55.4
220	29.6	0.0817	0.342	54.7
240	25.7	0.0806	0.347	54.0
260	22.4	0.0794	0.352	53.3
280	19.7	0.0783	0.357	52.7
300	17.5	0.0771	0.362	52.0
320	15.6	0.0759	0.367	51.3
340	13.9	0.0748	0.372	50.6
360	12.5	0.0736	0.377	49.9
380	11.3	0.0725	0.382	49.2
400	10.3	0.0713	0.387	48.5
420	9.4	0.0701	0.392	47.8
440	8.6	0.0690	0.397	47.1
460	7.9	0.0678	0.402	46.4
480	7.3	0.0667	0.407	45.7
500	6.7	0.0655	0.412	45.0
520	6.2	0.0643	0.417	44.3
540	5.8	0.0632	0.422	43.7
550	5.6	0.0626	0.425	43.3

SI Units

Temperature °C	Viscosity mPa·s	Thermal Cond. W/m·K	Specific Heat kJ/kg·K	Density kg/m ³
70	48.6	0.147	1.368	911
71	47.7	0.147	1.368	909
82	40.4	0.145	1.389	898
93	34.5	0.143	1.410	887
104	29.6	0.141	1.431	875
116	25.7	0.139	1.452	864
127	22.4	0.137	1.473	853
138	19.7	0.135	1.494	843
149	17.5	0.133	1.515	832
160	15.6	0.131	1.535	821
171	13.9	0.129	1.556	810
182	12.5	0.127	1.577	798
193	11.3	0.125	1.598	787
204	10.3	0.123	1.619	776
216	9.4	0.121	1.640	765
227	8.6	0.119	1.661	754
238	7.9	0.117	1.682	742
249	7.3	0.115	1.703	731
260	6.7	0.113	1.724	720
271	6.2	0.111	1.745	709
282	5.8	0.109	1.766	699
288	5.6	0.108	1.778	693

