

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 an environmentally friendly, 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 not corrosive towards metals and is compatible with a variety of polymers commonly used to make gaskets, valves, and other components of heat transfer fluid systems. The fluid demonstrates low toxicity and low flammability. In addition, the low evaporation rate makes it a good choice to minimize fluid loss in open bath systems.

■ Thermal Stability

The maximum operating temperature of Dynalene 600 is 288°C (550°F) in an open system and 350°C (662°F) in a closed system. Dynalene 600 shows excellent resistance to viscosity breakdown at high temperatures. The fluid demonstrates no change in its physical properties after continuous operation up to 350°C in closed systems. The weight loss and gel time data for Dynalene 600 in open bath systems at various temperatures are shown below.

Percent Weight Loss at 249°C (480°F)

After 4 hours.....	2.0
After 1 day.....	4.5
After 2 days.....	7.0

Percent Weight Loss at 288°C (550°F)

After 4 hours.....	3.0
After 1 day.....	9.4
After 2 days.....	11.5

Gel Time (in hours)

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

Recommended Temperature Range:

Open systems: 70°C (158°F) to 288°C (550°F)
Closed systems: 70°C (158°F) to 350°C (662°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 Safety Data Sheet, contact our Dynalene sales representatives.

Composition:	Polydimethylsiloxane
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)

**Freezing Point is lower than Pour Point*

■ Benefits of Choosing Dynalene 600

- Low oral toxicity
- High thermal stability
- High flash point
- Odorless
- Low evaporation rate
- Cost-effective
- Available worldwide
- Total fluid care option
- Proven performance
- Resistant to oxidation

■ Dynalene's Fluid Care Program

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

■ Quantity & Availability

Dynalene 600 is offered in 1, 5, and 55-gallon containers. Pricing depends on quantity, and Dynalene, Inc. will work with you to try and fit your budget.

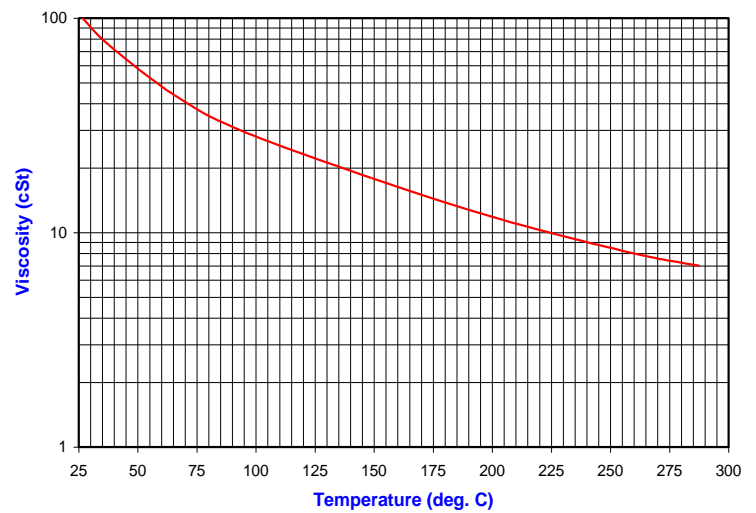
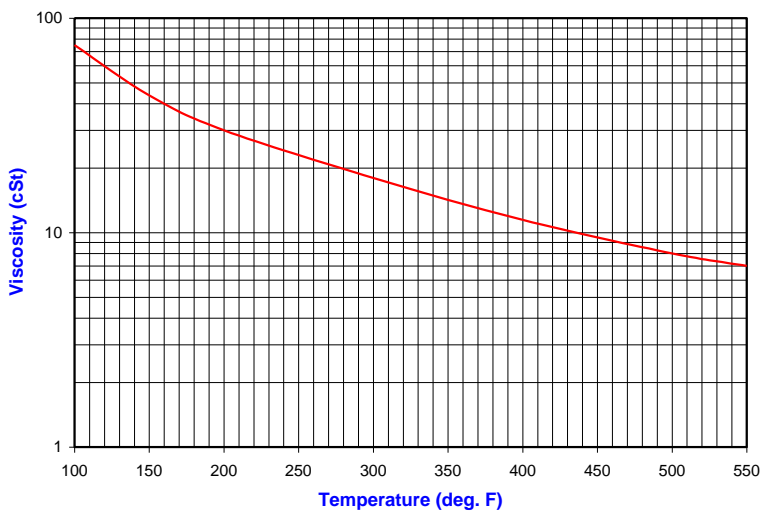
Properties of Dynalene 600

US Units

SI 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

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



Product Disclaimer

The information contained in this entire publication is presented in good faith at “no charge” and is believed to be correct as of the date indicated. No representations or warranties are made as to its completeness or accuracy. The information listed is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use. In no event will the seller be responsible for damages of any nature whatsoever resulting from the use of, or reliance upon, this information or the product to which this information refers. Nothing contained on this page is to be construed as a recommendation to use the product, process, equipment or formulation in conflict with any patent. No representation or warranty, expressed or implied, is made that the use of this product will not infringe any patent.

No representations or warranties, either expressed or implies, of merchantability, fitness for a particular purpose or for any other nature are made with respect to the information, or the product to which the information refers.

Contact Information

Corporate Headquarters

Dynalene, Inc.
5250 West Coplay Road
Whitehall, Pennsylvania 18052
Phone: 610-262-9686 / 1-877-244-5525
Fax: 610-262-7437
Email: info@dynalene.com
Website: www.dynalene.com

Midwest Location

248 Beinoris Dr
Wood Dale, IL 60191
Phone: 1-855-216-7639
Email: centralsales@dynalene.com

West Location

1701 S 5350 W
Salt Lake City, UT 84104
Phone: 1-877-244-5525
Email: westsales@dynalene.com