

## Single Fluid, High Temperature Heat Transfer Fluid

### Process Applications

- High-temperature applications
- Pharmaceutical
- Textile manufacturing
- Metallurgy
- Plastic extrusion
- Injection molding
- Process cooling & heating
- Petroleum industry
- Rubber processing

### ■ Dynalene SF Overview

Dynalene SF offers the process industry a versatile, cost-effective heat transfer fluid proven to be thermally stable at temperatures up to 315°C (600°F). As a non-aqueous heat transfer fluid, it provides operational safety by reducing process hazards when used with water-sensitive products.

Unlike less-stable mineral oils, Dynalene SF has demonstrated excellent performance over a wide range of temperatures without compromising system reliability or integrity – important factors in confidently choosing a fluid for long-term use.

### ■ Materials Compatibility

All materials must have the required resistance to temperature and pressure. Cadmium and zinc are not considered suitable as they catalyze the thermal breakdown of the fluid. Copper and brass may promote oxidation and should only be used in oxygen-free systems.

PTFE and other fluoropolymers are suitable for Dynalene HT up to the polymer manufacturer's recommended temperature. Thermoplastics such as PVC, polyethylene, and most types of rubber are not recommended.

### ■ Benefits of Choosing Dynalene SF

- High boiling, flash, and fire points
- Wide temperature range
- Low toxicity
- Excellent performance
- Safe to use
- Available worldwide
- Cost-effective
- Total fluid care option

### ■ Quantity & Availability

Dynalene SF is usually purchased in 1, 5, and 55-gallon containers, but bulk tankers are also available. Pricing depends on quantity, and Dynalene, Inc. will work with you to try to fit your budget.

#### Recommended Temperature Ranges:

Closed Systems:

0°C (32°F) to 315°C (600°F)

Open Systems:

20°C (68°F) to 150°C (300°F)

### ■ Properties of Dynalene SF

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

Composition:	Synthetic alkylated aromatics
Appearance:	Clear, light brown
Odor:	Low odor
Pour Point:	-60°C (-76°F)
Boiling Point:	>330°C (>626°F)
Flash Point:	180°C (356°F)
Autoignition Temp:	330°C (626°F)
Max Film Temp:	340°C (644°F)
Max Fluid Outlet Temp:	315°C (600°F)
Min Pumpability Limit:	-10°C (14°F)
Average Molecular Wt:	300

### ■ 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 changes in the fluid year to year so adjustments can be made to keep your system working at its best.

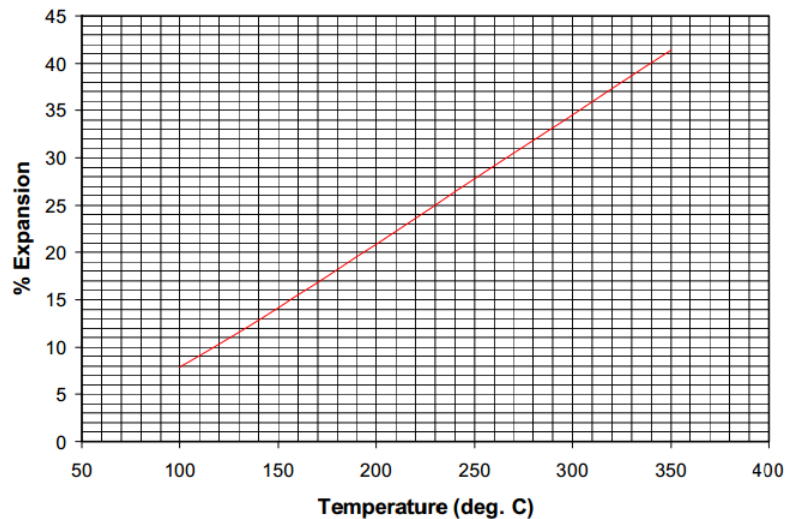
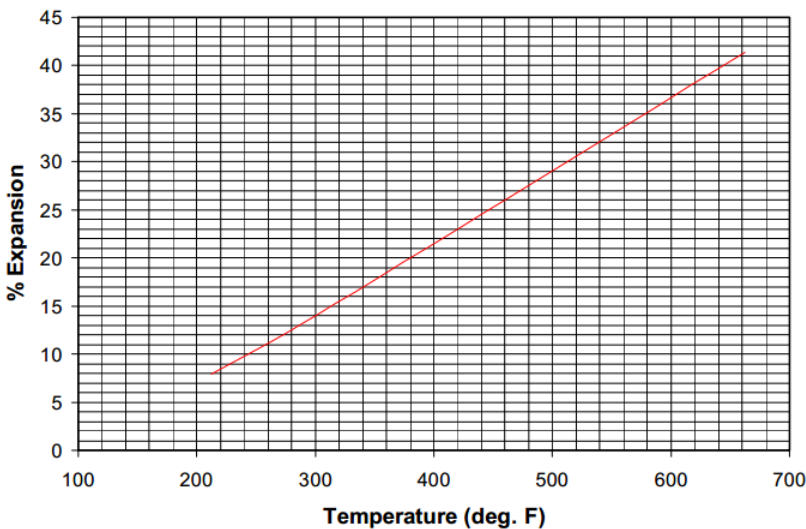
# US Units

Temp °F	Viscosity cP	Thermal Cond. BTU/hr-ft.°F	Specific Heat BTU/lb.°F	Density lb/ft <sup>3</sup>
32	160	0.0801	0.453	55.5
40	108	0.0799	0.456	55.3
60	49.0	0.0794	0.466	54.8
80	27.0	0.0789	0.476	54.3
100	17.0	0.0785	0.486	53.9
120	11.0	0.0780	0.495	53.4
140	8.20	0.0775	0.505	52.9
160	6.20	0.0770	0.515	52.5
180	4.80	0.0765	0.524	52.0
200	3.90	0.0760	0.534	51.6
220	3.20	0.0755	0.544	51.1
240	2.70	0.0750	0.553	50.6
260	2.30	0.0745	0.563	50.2
280	1.90	0.0740	0.573	49.7
300	1.70	0.0735	0.583	49.2
320	1.50	0.0730	0.592	48.8
340	1.30	0.0724	0.602	48.3
360	1.20	0.0719	0.612	47.8
380	1.00	0.0714	0.621	47.4
400	0.93	0.0708	0.631	46.9
420	0.85	0.0703	0.641	46.4
440	0.77	0.0697	0.650	46.0
460	0.7	0.0692	0.660	45.5
480	0.64	0.0686	0.670	45.0
500	0.59	0.0681	0.680	44.6
520	0.55	0.0675	0.689	44.1
540	0.51	0.0669	0.699	43.6
560	0.47	0.0664	0.709	43.2
580	0.44	0.0658	0.718	42.7
600	0.41	0.0652	0.728	42.2

# SI Units

Temp °C	Viscosity mPa-s	Thermal Cond. W/m-K	Specific Heat kJ/kg-K	Density kg/m <sup>3</sup>
0	160	0.1361	1.894	890
10	70.0	0.1354	1.930	884
20	37.0	0.1347	1.967	877
30	23.0	0.1340	2.003	870
40	15.0	0.1332	2.040	863
50	11.0	0.1325	2.076	857
60	8.10	0.1318	2.113	850
70	6.30	0.1310	2.150	843
80	5.00	0.1303	2.186	836
90	4.10	0.1295	2.223	830
100	3.40	0.1287	2.259	823
110	2.90	0.1280	2.296	816
120	2.40	0.1272	2.332	810
130	2.20	0.1264	2.369	803
140	1.90	0.1256	2.405	796
150	1.70	0.1248	2.442	789
160	1.50	0.1240	2.478	783
170	1.30	0.1232	2.515	776
180	1.20	0.1224	2.552	769
190	1.10	0.1216	2.588	763
200	1.00	0.1208	2.625	756
210	0.88	0.1200	2.661	749
220	0.81	0.1191	2.698	742
230	0.75	0.1183	2.734	736
240	0.69	0.1174	2.771	729
250	0.64	0.1166	2.807	722
260	0.59	0.1157	2.844	715
270	0.55	0.1149	2.880	709
280	0.51	0.1140	2.917	702
290	0.48	0.1131	2.954	695
300	0.45	0.1123	2.990	689
310	0.42	0.1114	3.027	682
315	0.41	0.1109	3.045	678

## Percent Expansion



# Vapor Pressure

Temperature		Vapor Pressure	
°C	°F	psi	mmHg
160	320	0.02	1.05
180	356	0.05	2.78
200	392	0.13	6.68
220	428	0.29	14.8
240	464	0.58	30.1
260	500	1.11	57.3
280	536	1.99	103
300	572	3.41	176

## Product Disclaimer

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