

# Dynalene HF-LO

## High Flash/Nontoxic Low Temperature Fluid Information

Dynalene HF-LO<sup>®</sup> heat transfer fluid is engineered to offer nontoxic and odorless qualities. Dynalene HF-LO<sup>®</sup> is an environmentally sound, thermally effective with a high flash point. When operator safety, environmental impact and price are your requirements, Dynalene HF-LO<sup>®</sup> is your solution.

The Dynalene "LO" family of fluids, including Dynalene HF-LO<sup>®</sup>, Dynalene LO-170<sup>®</sup> and Dynalene LO-230<sup>®</sup>, all consistently provide a high-level of user friendly performance to meet expectations of the customer.



### Typical Properties of Dynalene HF-LO<sup>®</sup>

**Composition:** Aliphatic Hydrocarbon Blend  
**Appearance and Color:** Transparent, clear colorless

Property	SI units	US units
Freezing Point:	<-118°C	<-180°F
Boiling Point:	>191°C	>376°F
Flash Point (closed cup):	>61°C	>141°F
Flash Point (open cup):	68.8°C	156°F
Fire Point:	72°C	162°F
Autoignition Temp:	>337°C	>640°F
Critical Temp <sup>1</sup> :	394°C	741°F
Critical Pressure <sup>1</sup> :	27 bar	26.7 atm
Avg. Molecular Wgt:		150
Dielectric Constant:		2.1-2.2
	<sup>1</sup> —estimated	

### Recommended Temperature Ranges:

**Open System:** -52°C (-60°F) to 58°C (135°F)  
**Closed System:** -73°C (-100°F) to 177°C (350°F)

### Polymer and Gasket Compatibility

- ◆ Acetal
- ◆ Aramid Fiber
- ◆ Chemraz (FFKM)
- ◆ Epoxy
- ◆ Fluorocarbon (FILM)
- ◆ Fluoroelastomer
- ◆ Glass Fiber
- ◆ Gylon Style 3500, 3504, & 3510
- ◆ Kalrez
- ◆ Kel-F (CTFE)
- ◆ Peek
- ◆ PTFE
- ◆ Teflon (All)
- ◆ Teflon Encapsulated Silicone
- ◆ Teflon Encapsulated Viton
- ◆ Teflon Impregnated Fiberglass
- ◆ Viton
- ◆ Resin Impregnated Carbon Graphite

### Metal Compatibility

- ◆ Aluminum
- ◆ Brass
- ◆ Bronze (All)
- ◆ Carbon Steel
- ◆ Cast Steel
- ◆ Copper
- ◆ Copper Nickel
- ◆ Monel
- ◆ Nickel
- ◆ Stainless Steel (All)
- ◆ Stainless Steel Clad
- ◆ Tantalum
- ◆ Titanium

For more technical, health and safety information or to request a Material Safety Data Sheet (MSDS), contact our Dynalene sales representative at:  
Phone: 610-262-9686 Fax: 610-262-7437 E-mail: [info@dynalene.com](mailto:info@dynalene.com)

# Dynalene HF-LO

Temperature	Viscosity	Thermal Conductivity	Specific Heat	Density
°F	cP	Btu/hr•ft•°F	Btu/lb•°F	lb/ft <sup>3</sup>
-100	72.5	0.0749	0.416	51.9
-80	28.0	0.0736	0.426	51.4
-60	14.1	0.0722	0.436	50.9
-40	8.4	0.0709	0.446	50.3
-20	5.5	0.0696	0.456	49.8
0	3.9	0.0683	0.466	49.3
20	2.9	0.0670	0.476	48.8
40	2.3	0.0657	0.487	48.2
60	1.8	0.0644	0.497	47.7
80	1.5	0.0631	0.507	47.2
100	1.2	0.0618	0.517	46.7
120	1.0	0.0605	0.527	46.1
140	0.87	0.0592	0.537	45.6
160	0.76	0.0579	0.547	45.1
180	0.66	0.0566	0.557	44.6
200	0.58	0.0553	0.567	44.0
220	0.52	0.0539	0.577	43.5
240	0.46	0.0526	0.587	43.0
260	0.41	0.0513	0.598	42.5
280	0.37	0.0500	0.608	41.9
300	0.34	0.0487	0.618	41.4
320	0.31	0.0474	0.628	40.9
340	0.28	0.0461	0.638	40.3
350	0.27	0.0455	0.643	40.1

Temperature	Viscosity	Thermal Conductivity	Specific Heat	Density
°C	mPa•s	W/m•K	kJ/kg•K	kg/m <sup>3</sup>
-73	70.2	0.1272	1.742	833
-70	52.7	0.1266	1.753	831
-60	23.9	0.1246	1.791	823
-50	13.3	0.1226	1.829	816
-40	8.4	0.1206	1.867	808
-30	5.8	0.1186	1.905	800
-20	4.2	0.1166	1.943	793
-10	3.2	0.1146	1.981	785
0	2.5	0.1126	2.019	778
10	2.0	0.1106	2.057	770
20	1.6	0.1086	2.095	762
30	1.4	0.1066	2.133	755
40	1.2	0.1046	2.171	747
50	1.00	0.1026	2.209	740
60	0.87	0.1006	2.247	732
70	0.77	0.0986	2.285	724
80	0.68	0.0966	2.323	717
90	0.60	0.0946	2.361	709
100	0.54	0.0926	2.399	702
110	0.49	0.0906	2.437	694
120	0.44	0.0886	2.475	686
130	0.40	0.0866	2.513	679
140	0.37	0.0846	2.551	671
150	0.34	0.0826	2.589	664
160	0.31	0.0806	2.627	656
170	0.29	0.0786	2.665	649
177	0.27	0.0772	2.692	643

## Dynalene HF-LO Vapor Pressure

