

Low Odor, Low Temperature Heat Transfer Fluid

Process Applications

- Open baths
- Closed loop systems
- Process cooling & heating
- Cryogenic
- Refrigeration systems
- Freeze-drying

■ Dynalene LO-170 Overview

Dynalene LO-170 heat transfer fluid is a non-toxic, thermally effective odorless fluid. It can be used in a variety of different applications, including open temperature baths or closed loop industrial heat transfer systems. When operator safety and environmental impact are important to you, consider Dynalene LO-170.

The Dynalene 'LO' family of fluids, including HF-LO, LO-170, and LO-230, all consistently provide a high-level of user friendly performance to meet every expectation of the customer.

■ Benefits of Choosing Dynalene LO-170

- Non-toxic, no odor
- Thermally effective
- Available throughout North America
- Cost-effective
- Total fluid care
- Proven performance

■ Materials Compatibility

Polymer and Gasket Compatibility:

- Acetal
- Aramid Fiber
- Chemraz (FFKM)
- Epoxy
- Fluorocarbon (FILM)
- Fluoroelastomer
- Glass Fiber
- Gylon
- Kalrez
- Kel-F (CTFE)
- Peek
- PTFE
- Teflon (All)
- PTFE-Silicone
- PTFE-Viton
- PTFE-Fiberglass
- Viton
- Resin-Graphite

Metal Compatibility:

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

Recommended Temperature Range:

Open System:

-40°C (-40°F) to 74°C (165°F)

Closed System:

-40°C (-40°F) to 205°C (400°F)

■ Properties of Dynalene LO-170

A comprehensive list of all thermo-physical properties of Dynalene LO-170 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:	Aliphatic hydrocarbon blend
Appearance:	Clear
Odor:	None

Freezing Point:	<-60°C (<-76°F)
Boiling Point:	>223°C (>433°F)
Flash Point (Closed):	>77°C (>170°F)

Viscosity (-7°C, 20°F):	2.6 mPa·s (2.9 cP)
Specific Gravity*:	0.79
Specific Heat*:	1.88 kJ/kgK (0.45 BTU/lb°F)
Thermal Conductivity*:	0.11 W/mK (0.065 BTU/fthr°F)

*taken at 20°C (68°F)

■ 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

Temp °F	Viscosity cP	Thermal Cond. BTU/hr-ft-°F	Specific Heat BTU/lb-°F	Density lb/ft ³
-40	33.2	0.0732	0.395	50.1
-20	15.9	0.0719	0.405	49.7
0	9.10	0.0706	0.415	49.4
20	5.80	0.0693	0.425	49.0
40	4.00	0.0680	0.435	48.7
60	2.90	0.0667	0.445	48.3
80	2.30	0.0654	0.455	48.0
100	1.80	0.0641	0.465	47.6
120	1.40	0.0627	0.476	47.3
140	1.20	0.0614	0.486	46.9
160	1.00	0.0601	0.496	46.6
180	0.84	0.0588	0.506	46.3
200	0.73	0.0575	0.516	45.9
220	0.63	0.0562	0.526	45.6
240	0.56	0.0549	0.536	45.2
260	0.49	0.0536	0.546	44.9
280	0.44	0.0523	0.556	44.5
300	0.39	0.0510	0.566	44.2
320	0.35	0.0497	0.576	43.8
340	0.32	0.0484	0.586	43.5
360	0.29	0.0471	0.597	43.1
380	0.27	0.0458	0.607	42.8

SI Units

Temperature °C	Viscosity mPa-s	Thermal Cond. W/m-K	Specific Heat kJ/kg-K	Density kg/m ³
-40	33.2	0.1245	1.652	804
-30	16.9	0.1225	1.690	799
-20	10.0	0.1205	1.728	794
-10	6.60	0.1185	1.766	789
0	4.60	0.1165	1.804	784
10	3.40	0.1145	1.842	779
20	2.60	0.1125	1.880	774
30	2.10	0.1105	1.918	769
40	1.70	0.1085	1.956	764
50	1.40	0.1065	1.994	759
60	1.20	0.1045	2.032	754
70	1.00	0.1025	2.070	749
80	0.87	0.1005	2.108	744
90	0.76	0.0985	2.146	739
100	0.67	0.0965	2.184	734
110	0.59	0.0945	2.222	729
120	0.53	0.0925	2.260	724
130	0.48	0.0905	2.298	719
140	0.43	0.0885	2.336	714
150	0.39	0.0865	2.374	709
160	0.35	0.0845	2.412	704
170	0.32	0.0825	2.450	699
180	0.30	0.0805	2.488	694
190	0.28	0.0785	2.526	689
200	0.25	0.0765	2.564	684
205	0.24	0.0755	2.583	681

