



DOWTHERM G

Synthetic Organic Heat Transfer Fluid

DOWTHERM* G heat transfer fluid contains a mixture of di- and tri-aryl compounds that provides unequaled performance in liquid phase heat transfer systems. It is the most thermally stable low pressure liquid phase heat transfer fluid on the market today and has excellent flow characteristics at low temperatures.

Recommended use temperature range

20°F to 675°F (-6°C to 360°C)

Suitable applications

Liquid phase heat transfer systems.

For environmental, health and safety information for this product, contact your Dow sales representative or call the number for your area on the second page of this sheet for a Material Safety Data Sheet (MSDS).

Typical Properties of DOWTHERM G Fluid†

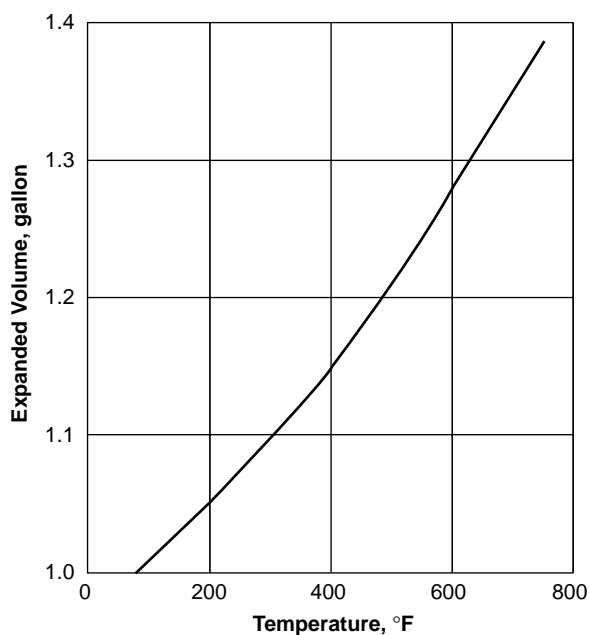
Composition: Mixture of di- and tri-aryl compounds		
Color: Light amber to brown		
Property	English Units	SI Units
Crystal Point	Below 40°F	Below 4°C
Atmospheric Reflux Boiling Point	552°F	289°C
Flash Point ¹	280°F	137°C
Autoignition Temperature ²	810°F	432°C
Pseudo Critical Constants:		
T _c	1018°F	548°C
P _c , atm	27.2	27.56 bar
V _c , ft ³ /lb	0.0505	3.150 l/kg
Average Molecular Weight	204.6	
Density @ 75°F	8.71 lb/gal	
Density @ 25°C	1043 kg/m ³	

† Not to be construed as specifications

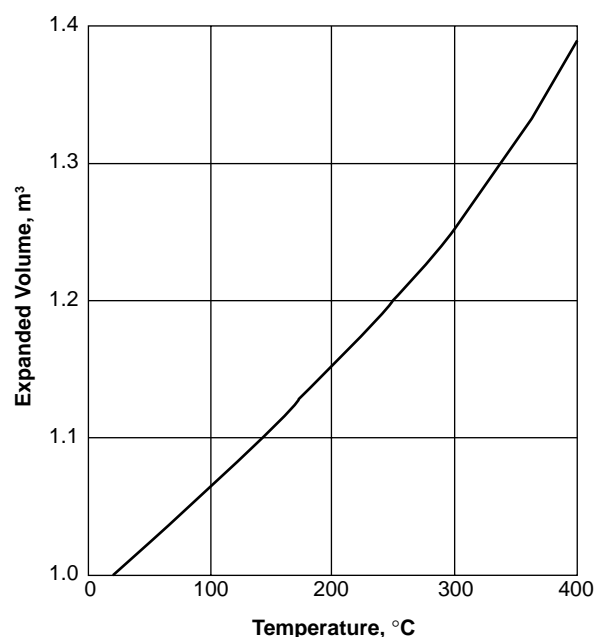
¹ C.O.C.

² The old ASTM procedure, D-2155-66 has been withdrawn by the testing society and replaced by ASTM E 659-78

**Thermal Expansion of DOWTHERM G Fluid
(English Units) (Basis: 1 gallon at 77°F)**



**Thermal Expansion of DOWTHERM G Fluid
(SI Units) (Basis: 1 m³ at 25°C)**



DOWTHERM G Synthetic Organic Heat Transfer Fluid

Saturation Liquid Properties of
DOWTHERM G Fluid (English Units)

TEMP.	SPEC. HEAT	DENSITY	THERMAL COND.	VISC.	VAPOR PRESS.
°F	Btu/(lb)(°F)	lb/ft ³	Btu/(hr)(ft ²)(°F/ft)	cps	psia
25	0.349	66.59	0.0746	51.1	0.00
50	0.361	65.91	0.0737	20.4	0.00
75	0.373	65.24	0.0728	10.6	0.00
100	0.384	64.57	0.0718	6.51	0.00
125	0.396	63.90	0.0709	4.44	0.00
150	0.407	63.22	0.0700	3.24	0.00
175	0.419	62.55	0.0691	2.48	0.01
200	0.431	61.88	0.0681	1.97	0.02
225	0.442	61.21	0.0672	1.61	0.04
250	0.454	60.53	0.0663	1.34	0.09
275	0.466	59.86	0.0653	1.13	0.16
300	0.477	59.19	0.0644	0.97	0.29
325	0.489	58.52	0.0635	0.84	0.48
350	0.500	57.84	0.0625	0.73	0.79
375	0.512	57.17	0.0616	0.64	1.24
400	0.524	56.50	0.0607	0.57	1.89
425	0.535	55.83	0.0597	0.51	2.81
450	0.547	55.15	0.0588	0.46	4.06
475	0.558	54.48	0.0579	0.41	5.73
500	0.570	53.81	0.0570	0.37	7.93
525	0.582	53.13	0.0560	0.34	10.76
550	0.593	52.46	0.0551	0.31	14.35
575	0.605	51.79	0.0542	0.29	18.83
600	0.616	51.12	0.0532	0.26	24.35
625	0.628	50.44	0.0523	0.24	31.07
650	0.640	49.77	0.0514	0.23	39.15
675	0.651	49.10	0.0504	0.21	48.75
700	0.663	48.43	0.0495	0.20	60.08
725	0.674	47.75	0.0486	0.18	73.29

Saturation Liquid Properties of
DOWTHERM G Fluid (SI Units)

TEMP.	SPEC. HEAT	DENSITY	THERMAL COND.	VISC.	VAPOR PRESS.
°C	kJ/kg K	kg/m ³	W/m K	mPa·s	bar
-5	1.458	1066.2	0.1293	55.9	0.00
15	1.528	1050.7	0.1270	15.7	0.00
35	1.598	1035.3	0.1247	7.11	0.00
55	1.668	1019.8	0.1224	4.09	0.00
75	1.738	1004.3	0.1201	2.69	0.00
95	1.808	988.8	0.1177	1.92	0.00
115	1.878	973.3	0.1154	1.45	0.00
135	1.948	957.8	0.1131	1.13	0.01
155	2.018	942.3	0.1108	0.91	0.02
175	2.088	926.8	0.1085	0.74	0.05
195	2.158	911.3	0.1061	0.62	0.10
215	2.228	895.8	0.1038	0.52	0.18
235	2.297	880.3	0.1015	0.45	0.30
255	2.367	864.8	0.0992	0.39	0.49
275	2.437	849.3	0.0969	0.34	0.76
295	2.507	833.8	0.0945	0.30	1.14
315	2.577	818.3	0.0922	0.27	1.66
335	2.647	802.8	0.0899	0.24	2.35
355	2.717	787.3	0.0876	0.21	3.24
375	2.787	771.8	0.0853	0.19	4.37

For further information, call...

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In other Global Areas: 1-989-832-1560 • FAX: 1-989-832-1465

<http://www.dow.com/heattrans>

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