

JARYTHERM® DBT

JARYTHERM® DBT is especially suitable for heating under atmospheric pressure within the 250°C – 350°C temperature range. It is primarily used in the chemical and plastics converting industries, although it is also suitable for all processes requiring high temperature levels. JARYTHERM® DBT is a 100% synthetic, high quality heat-transfer fluid. It has a well-defined composition and it is easy to follow fluid ageing and top-up management.

Product Specifications – Jarytherm® DBT CAS # 53585-53-8 / EINECS # 258-649-2	Specification	Standard method
Purity (weight % , Polyaryllalkane content)	≥ 98 %	GC analysis
Water (ppm)	≤ 100	ASTM D6304
Acidity (mg KOH/g)	< 0.02	ASTM D664

MAIN PROPERTIES

Composition	Blend of Dibenzyltoluene isomers
Flash point	200 °C
Fire point	230 °C
Pour point	- 34 °C
Boiling Point	390 °C
Auto-ignition temperature	470 °C
Minimum temperature in use	0 °C
Maximum temperature in use Bulk ... Film	350 °C 370 °C

Jarytherm® DBT is worldwide available and proposed in following packaging:

- 200 kg drums
- 1000 l IBC
- Bulk 20 to 24 MT
- (isocontainer or roadtanker)

MAIN ADVANTAGES

- High performance synthetic heat transfer fluid operating in the range 0 to 350 °C.
- High Purity: chemical composition is well defined.
- Excellent thermal stability and heat transfer properties. Jarytherm® DBT has the best heat transfer efficiency, especially in the temperature range 250°C to 350°C.
- Low cold viscosity (making start-up easier, and reducing energy requirements). Thanks to its low viscosity the pumpability limit of Jarytherm® DBT is close to -5°C. Furthermore due to its low pour point (-34°C), steam tracing of lines is generally not necessary.
- Compatibility with all other thermal fluids.
- DBT is REACH registered

EXAMPLES OF APPLICATIONS

Oil and Gas Processing - Refining - Plastics and Polymer Manufacturing - Synthetic Fiber Manufacturing - Specialty Chemical Manufacturing - Chemical Manufacturing - Biofuel Manufacturing - Desalination - Food & paper - Food & Beverage Processing.

HEALTH AND SAFETY

- Please refer to the latest Safety Data Sheet

TABLE OF PHYSICAL PROPERTIES

Temperature (°C)	Density (kg/m ³)	Specific Heat (kJ/kg/K)	Thermal Conductivity (W/mK)	Kinematic Viscosity (mm ² /s)	Vapour Pressure (mbar)
0	1059	1.520	0.130	259	
10	1052	1.552	0.129	104	
20	1044	1.584	0.128	50	
30	1037	1.616	0.127	28	
40	1029	1.648	0.126	17	
50	1022	1.680	0.125	11	
60	1014	1.711	0.125	7.9	
70	1007	1.743	0.124	5.8	
80	1000	1.775	0.123	4.4	
90	992	1.807	0.122	3.5	
100	985	1.839	0.121	2.8	
110	977	1.871	0.121	2.4	
120	970	1.903	0.120	2.0	
130	962	1.935	0.119	1.7	
140	955	1.967	0.118	1.5	
150	948	1.999	0.117	1.3	
160	940	2.030	0.116	1.2	1
170	933	2.062	0.116	1.1	1
180	925	2.094	0.115	1.0	2
190	918	2.126	0.114	0.88	4
200	911	2.158	0.113	0.81	6
210	903	2.190	0.112	0.75	9
220	896	2.222	0.112	0.69	13
230	888	2.254	0.111	0.65	19
240	881	2.286	0.110	0.61	27
250	873	2.318	0.109	0.57	39
260	866	2.349	0.108	0.54	53
270	859	2.381	0.107	0.51	73
280	851	2.413	0.107	0.49	98
290	844	2.445	0.106	0.47	131
300	836	2.477	0.105	0.45	171
310	829	2.509	0.104	0.43	223
320	821	2.541	0.103	0.41	286
330	814	2.573	0.102	0.40	363
340	807	2.605	0.102	0.38	457
350	799	2.637	0.101	0.37	571
360	792	2.668	0.100	0.36	706
370	784	2.700	0.099	0.35	867