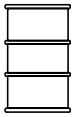
SINOPEC
PERFORMANCE IN MOTION

Product Data Sheet

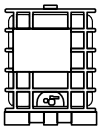
Product	**Sinopec L-QB300 Heat Transfer Oil**
Summary	**Product description** Sinopec L-QB300 Heat Transfer Fluid is formulated using refined mineral oil,it has excellent high temperature thermal stability, and various additives such as detergent, dispersant, the high temperature antioxidants, etc. It is recommended for use as a heat transfer fluid in closed and open heat circulation systems where the bulk oil temperature does not exceed 290°C, and is widely used in petroleum chemical, synthetic fiber, synthetic resin, medicine, printing and dyeing, power generation and other industries.

Available sizes

PAIL – 18L



DRUM – 200L



IBC – 1000L

Also available in bulk

Applications

Sinopec L-QB300 Heat Transfer Fluid is suitable for use in:

- Closed and open heat transmission systems with forced or unforced circulation operating at a maximum bulk temperature of 290°C.
- Drying and heating processes, such as those used in timber processing, textile finishing, food processing and the chemical industry.

Features and benefits

- The refined mineral oil has a high distillation point, which avoids pressure build up in the closed circulation system.
- Excellent thermal stability ensures the oil does not crack, break down or produce deposits at high temperatures, extends the life of the oil, protects the system and reduces maintenance costs.
- The high flash point and low evaporation rate enable the oil to be used in closed systems up to 290°C.
- The high specific heat and thermal conductivity of the oil enable rapid heat transfer, improved operating efficiency and lower operating costs.
- Good fluidity at low temperatures ensures good oil circulation, even at low-temperature start-up.
- Good rust and corrosion resistance protect the system and reduce maintenance costs.
- Used aromatic oil can be recycled or retreated to protect environment.

Typical data

Sinopec L-QB300 Heat Transfer Oil	
Kinematic viscosity, ASTM D 445	
cSt @ 40°C	28.4
cSt @ 100°C	5.1
cSt @ 0°C	340
Thermal Stability (300°C, 720h) ASTM D 51528 Appearance Deteriorated Substance %	 Transparent Yellow 3.0
Flash point (COC), °C, ASTM D92	219
Self-ignition point, °C, ASTM E 659	336
Pour point, °C, ISO 3016	-12
Distillation Range Initial Distillation Point, °C ASTM D 8887 2%, °C ASTM D 86	 326 346
Micro-Conradson Carbon Residue, %wt, ISO 10370	0.01
Sulfur Content % ,ASTM D5453	0.016
Acid Value, mgKOH/kg ,ASTM D 974	0.02

These data are given as an indication of typical values and not as exact specifications.

Industry and OEM specifications

Sinopec L-QB300 Heat Transfer Fluid meets the performance requirements of the following industry specifications:	
DIN	51522
GB[1]	23971

[1] Note: 'GB' standards are the National Standards of the People's Republic of China.

Accuracy of information

Data provided in this PDS is typical and subject to change as a result of continuing product research and development. The information given was correct at the time of printing. The typical values given are subject to variations in the testing procedures and the manufacturing process may also result in slight variations. Sinopec guarantees that its lubricants meet any industry and OEM specifications referred to on this data sheet.

Sinopec cannot be held responsible for any deterioration in the product due to incorrect storage or handling. Information on best practice is available from your local distributor.

Product and environmental safety

This product should not cause any health problems when used in the applications suggested and when the guidance provided in the Material Safety Data Sheet (MSDS) is followed. Please consult the MSDS for more detailed advice on handling; MSDSs are available from your local distributor. Do not use the product in applications other than those suggested.

As with all products, please take care to avoid environmental contamination when disposing of this product. Used oil should be sent for reclamation/recycling or, if not possible, must be disposed of according to relevant government/authority regulations.

The thermodynamic parameters of L-QB300 heat transfer oil

Temperature/ ℃	Vapor pressured/kPa	Liquid density/(kg/m3)	Liquid heat capacity/(kJ/(kg•K))	Liquid thermal conductivity/(W/(m•K))	Liquid viscosity / (mm^2/s)
0	--	882	1.84	0.145	340
10		875	1.86	0.144	184
20	--	868	1.88	0.143	75
30		862	1.91	0.142	51.2
40	--	856	1.94	0.141	28.4
50		850	1.99	0.14	21
60	--	843	2.032	0.139	13.5
70		837	2.065	0.138	10.7
80	--	830	2.097	0.137	7.9
90		822	2.139	0.136	6.5
100	--	816	2.181	0.135	5.1
110		810	2.213	0.134	4.47
120		803	2.246	0.133	3.84
130		796	2.279	0.132	3.21
140		789	2.312	0.131	2.58
150	--	782	2.345	0.13	1.95
160	0.11	776	2.384	0.129	1.8
170	0.13	770	2.423	0.128	1.65
180	0.16	764	2.462	0.127	1.5
190	0.18	758	2.501	0.126	1.35
200	0.23	752	2.541	0.125	1.2
210	0.41	747	2.575	0.124	1.13
220	0.63	740	2.61	0.123	1.06
230	0.84	734	2.644	0.122	0.99
240	1.06	727	2.679	0.121	0.92
250	1.9	720	2.713	0.12	0.85
260	3.4	713	2.748	0.119	0.81
270	4.8	706	2.783	0.118	0.77
280	6.2	699	2.818	0.117	0.73
290	7.6	692	2.853	0.116	0.69
300	9.1	686	2.888	0.115	0.65