



Rodutherm Q

Synthetic organic heat transfer fluid

Introduction

Rodutherm Q is a kind of high performance and temperature heat transfer oil designed for use in the -35 °C -330 °C liquid heat transfer system.

Its strict thermal stability test prove that it can be applied to long-term stability at -35 °C -330 °C.

Rodutherm Q has superior thermal stability and antioxidant properties than other competitive brands, so it has a long life and low operating costs.

Typical Properties

PROPERTY	TYPICAL VALUE
Color	Clear to light yellow
Temperature Range	-35° to 330°C
Atmospheric Reflux Boiling Point	267°C
Flash Point(Closed cup)	119°C
Flash Point(Open cup)	130°C
Autoignition Temperature	412°C
Film Coefficient, W/m ² K (Btu/hr. ft. ² °F)	295
Flammability Limits of Vapor in Air:	
Upper Flammability Limit, 5.5Vol.% in Air	190°C
Lower Flammability Limit, 0.55Vol.% in Air	135°C
Estimated Critical Temperature	489°C
Estimated Critical Pressure	24 bar
Estimated Critical Volume	3.258 L/kg
Molecular Weight (average)	190



Liquid Properties

Temperature	Density	Specific Heat	Thermal Conduct	Viscosity	Vapor Pressure
°C	kg/m ³	kJ/(kg·K)	W/(m·k)	cP[mPa·s]	bar
-35	1011.4	1.478	0.1280	46.60	
0	980.5	1.589	0.1244	7.56	
40	950.2	1.716	0.1195	2.37	
80	920.0	1.842	0.1143	1.07	
120	889.8	1.966	0.1087	0.62	0.01
160	859.5	2.088	0.1028	0.41	0.05
200	829.3	2.208	0.0967	0.31	0.17
240	799.0	2.327	0.0905	0.24	0.51
280	768.8	2.444	0.0843	0.20	1.24
320	738.6	2.559	0.0780	0.17	2.61
360	708.3	2.672	0.0719	0.15	4.95