

Rodutherm 66

Synthetic Heat Transfer Fluid with excellent thermal stability

Introduction

Rodutherm 66 is synthetic heat transfer fluid with excellent thermal stability. It transfers heat at high operation temperature of 345°C with its outstanding performance.

Benefits

- ◆ Excellent thermal stability. Infrequency of thermal cracking and polymerization. Difficulty of deterioration and blocking the heat transfer.
- ◆ Low pour point at -35 °C . No need to heat the pipes and equipment. Application of wide temperature range from -12°C to 345°C.
- ◆ Boiling point of 330 °C at normal temperature. Can be used for liquid phase heat transfer system at normal temperature.
- ◆ No generation of metal corrosive material, which is suitable for all kinds of metallic system.

Typical Properties

PROPERTY		TYPICAL VALUE
Appearance		Light yellow
Density @15°C		1010 kg/m ³
Pour point		-35 °C
Kinematic Viscosity	cst@40°C	29 mm ² /s
	cst@100°C	3.6 mm ² /s
Flash point		157 °C
Auto-ignition temperature		374 °C
Thermal coefficient of expansion		0.000825
Moisture content		100 mg/kg
Distillation	10%	360 °C
	90%	390 °C
Sulphur content		0.001 %
Chlorine content		0.5 mg/kg
Acid value (account by KOH)		0.02 mg/g
Average molecular weight		252
Normal boiling point		330 °C
Maximum oil film temperature		373 °C

Liquid Properties

Temperature	Density	Heat Capacity		Thermal Conduct		Viscosity		Enthalpy Value	Vaporization Heat	Vapor Pressure	
°C	kg/m ³	Btu/(lb·°F) [cal/(g·°C)]	kJ/(kg·K)	Btu/(ft·hr·°F)	W/(m·K)	cSt mm ² /s	cP mPa·s	kJ/kg	kJ/kg	Kgf/cm ²	kPa
-10	1030	0.351	1.47	0.0686	0.1186	4058	4180	14.6	418.8		
0	1021	0.359	1.50	0.0684	0.1183	1551	1584	26.1	414.3		
20	1008	0.373	1.56	0.0679	0.1175	141	142.6	56.0	405.2		
50	988	0.397	1.66	0.0672	0.1163	17.1	16.94	104.9	392.4		
100	955	0.437	1.83	0.0655	0.1134	3.60	3.44	193.4	370.9	0.00051	0.050
150	920	0.480	2.01	0.0635	0.1099	1.636	1.505	288.6	351.7	0.0041	0.40
200	885	0.523	2.19	0.0610	0.1055	0.969	0.858	394.9	332.7	0.0232	2.28
250	848	0.569	2.38	0.0581	0.1005	0.670	0.568	508.1	313.8	0.0942	9.24
300	808	0.614	2.57	0.0546	0.0945	0.510	0.412	633.1	292.9	0.318	31.2
350	766	0.66	2.76	0.0508	0.0879	0.419	0.321	762.3	270.5	0.872	85.5