

# TOTAL SERIOLA K 3120

Synthetic Heat Transfer Fluid based on Alkylbenzene



## USES

- Heating of domestic and industrial premises
- All types of systems(piping, pumps, etc.)
- Production of steam and hot water
- Heating of heat treatment baths
- Temperature control for storage bins
- Manufacturing processes
- Heating by heat exchange
- Operational temperature: from -20 °C to 300 °C

## PROPERTIES

- Very long life cycle with good resistance to thermal cracking and to oxidation
- Excellent thermal stability even at high temperature
- Very good solubility for the oxidation products
- Miscible and compatible with all portion of mineral oil
- Very high auto-ignition point

## SPECIFICATION

- KS M 2501
- ISO 6743/12 class L family QB
- DIN 51502 class L

## CHARACTERISTICS

Test items		Method	Unit	Typical value
Density	15°C	ASTM D-1298	g/cm <sup>3</sup>	0.873
Viscosity	at 40°C	ASTM D-445	mm <sup>2</sup> /s (cSt)	18.23 3.48
	at 100°C			1.01
	at 200°C			0.58
	at 300°C			
Pour point		ASTM D-97	°C	-52.5
Flash point, COC		ASTM D-92	°C	200
Fire point			°C	227
Auto-ignition point		ASTM D-2155	°C	390
Total acid number		ASTM D-974	mgKOH/g	0.01
Distillation	IBP			335
	10%	ASTM D-86	°C	354
	90%			387
Conradson carbon residue		ASTM D-189	%	Nil
Thermal expansion coefficient			/°C	6.7 X 10 <sup>-4</sup>
Molecular weight		ASTM D-2502	-	315
Bulk temperature limit			°C	320
Limit temperature of oil film			°C	360

S-OIL TOTAL LUBRICANTS CO., LTD.  
1F, YTN TOWER 6-1 Namdaemunno 5-ga,  
Jung-gu, Seoul, Korea  
1/2

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2009. 06. 03

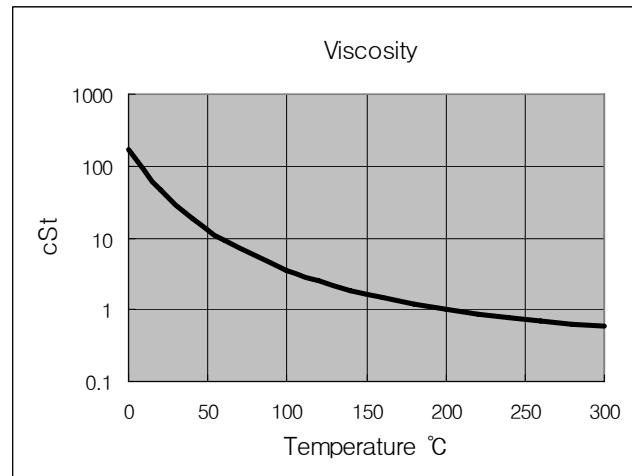
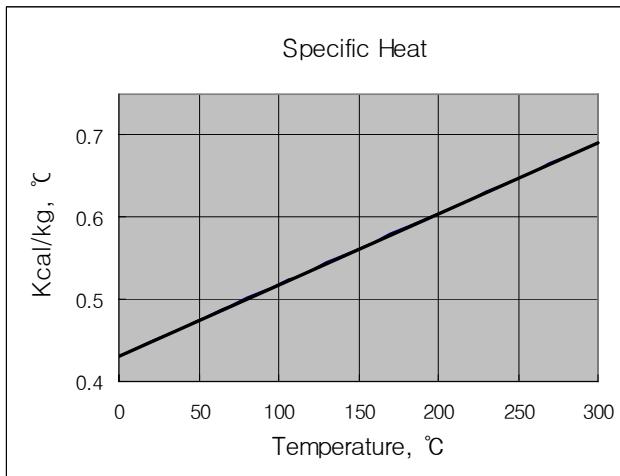
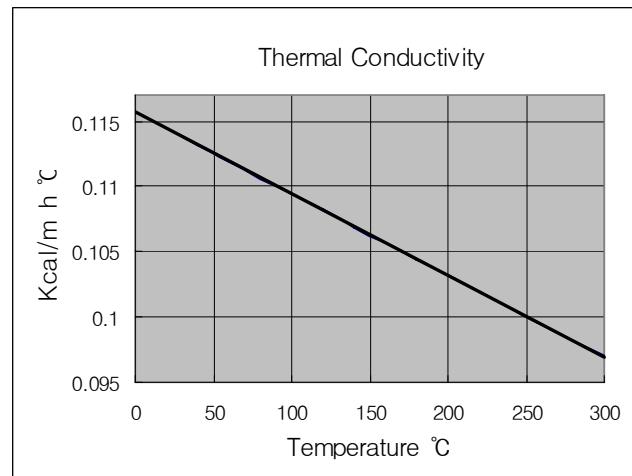
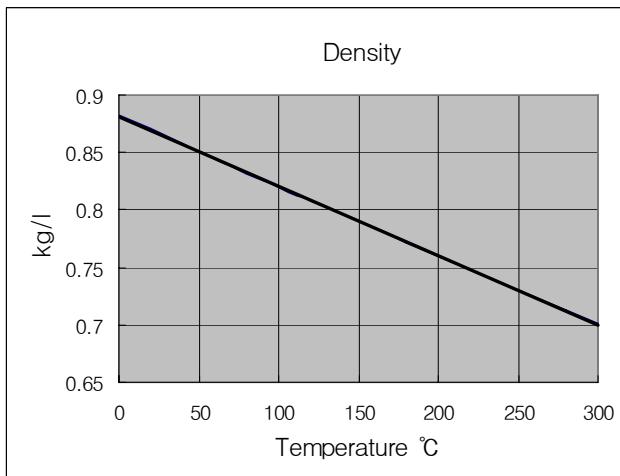
This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.  
A material safety data sheet is obtainable via your commercial adviser.



Above characteristics are mean values given as an information.

## ► Physical properties

Temperature (°C)	Specific Heat (kcal/kg °C)	Thermal Conductivity (kcal/m.hr. °C)	Density (g/cm³)	Viscosity (cSt)
0	0.4313	0.1157	0.8829	173
20	0.4487	0.1144	0.8702	46.65
40	0.4660	0.1132	0.8576	18.23
60	0.4833	0.1119	0.8451	9.07
100	0.5180	0.1094	0.8203	3.48
120	0.5353	0.1082	0.8081	2.47
140	0.5527	0.1069	0.7959	1.86
160	0.5700	0.1057	0.7839	1.47
180	0.5874	0.1044	0.7719	1.20
200	0.6047	0.1032	0.7600	1.01
220	0.6220	0.1019	0.7482	0.88
240	0.6394	0.1007	0.7365	0.77
260	0.6567	0.0994	0.7248	0.69
280	0.6741	0.0982	0.7133	0.63
300	0.6914	0.0970	0.7018	0.58



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