

# Addotherm™ K-600

## Synthetic Heat Transfer Fluid

### Product Description

Addotherm™ K-600 is a synthetic heat transfer fluid used in non-pressurized / low-pressure, indirect heating systems.

### Features and Benefits

- **Extended Life** – Years of reliable, lower operating cost, even when operating temperature reach a maximum extended use temperature of 300°C.
- **Better Thermal Properties** – High heat transfer coefficient rates, along with higher operating efficiency.
- **Better resistance to fouling** – Synthetic Fluid, resists the effects of oxidation better than mineral oils making less oxidation and solids formation. Better performance for the systems without nitrogen blanketing.
- **Better Low-Temperature Pumpability** – Easily pumpable at -10°C, which provides quick and easy startup.

### Recommended use Temperature Range

-10 °C to 300 °C.

### Applications

Addotherm™ K-600 delivers efficient, dependable, uniform process heat at atmospheric pressure. It is non-corrosive to the metals commonly used in the construction of heat transfer systems.

### Typical Properties

	Test Method	Unit	
Appearance	Visual		Clear, yellow Liquid
Composition			Synthetic Hydrocarbon Mixture
KV @ 40°C	ASTM D 445	mm <sup>2</sup> /S	23.6
KV @ 100°C	ASTM D 445	mm <sup>2</sup> /S	4.4
Bulk Temperature	ASTM D6743	°C	300
Maximum Film Temperature	ASTM D6743	°C	315
Flash Point PMCC	ASTM D 93	°C	177
Auto Ignition Temperature	ASTM D 92	°C	343
Pour Point	ASTM D 97	°C	-60
Vapor Pressure @ 200°C	ASTM D 2879	kPa	2.15

<b>Vapor Pressure @ 250°C</b>	ASTM D 2879	kPa	9.76
<b>Vapor Pressure @ 320°C</b>	ASTM D 2879	kPa	53.7
<b>Thermal Conductivity @ 200°C</b>	ASTM D 2717	W/(m.K)	0.107
<b>Thermal Conductivity @ 250°C</b>	ASTM D 2717	W/(m.K)	0.102
<b>Thermal Conductivity @ 320°C</b>	ASTM D 2717	W/(m.K)	0.0933
<b>Specific Heat @ 200°C</b>	ASTM D 2766	kJ/KgK	2.54
<b>Specific Heat @ 250°C</b>	ASTM D 2766	kJ/KgK	2.72
<b>Specific Heat @ 320°C</b>	ASTM D 2766	kJ/KgK	2.97
<b>IBP</b>	ASTM D 2887	°C	351
<b>TAN</b>	ASTM D664	mg KOH/g	< 0.02
<b>Moisture Content</b>	UOP 481	ppm	< 150
<b>Density @ 25°C</b>	ASTM D 4052	Kg/m <sup>3</sup>	863
<b>Copper corrosion</b>	ASTM D 130		<< 1a

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