

# MANFROST SF-2

— Synthetic Oil with Excellent Stability



*Heat Transfer specialist*

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Manfrost SF-2 is an ultra-low-temperature liquid-phase heat transfer fluid developed with specialized processes and formulations. It delivers outstanding low-temperature heat transfer and pumping performance while maintaining exceptional thermal stability. Manfrost SF-2 exhibits excellent performance across a wide temperature range of -120°C (-184°F) to 260°C (500°F)

## Performance Advantages

### (1) Superior Oxidation Stability

Heat transfer fluids are prone to severe oxidation during prolonged use, leading to polymerization into heavier components, increased viscosity, and more impurities. Therefore, selecting a heat transfer fluid with excellent oxidation stability is crucial.

### (2) Exceptional Low-Temperature Performance

Manfrost SF-2 remains highly fluid even at -120°C, making it an energy-efficient low-temperature cooling heat transfer fluid suitable for a broad temperature range.

### (3) Non-Corrosive

Manfrost SF-2 is virtually non-corrosive to industrial metals such as iron.

## Typical Properties

<b>Kinematic Viscosity @40°C</b>	1.74mm <sup>2</sup> /s
<b>Appearance</b>	Colorless, transparent
<b>Density@25°C</b>	873kg/m <sup>3</sup>
<b>Pour Point (°C)</b>	< -120°C
<b>Flash Point (°C)</b>	88°C
<b>Specific Heat@25°C</b>	1.8kJ/kg·°C
<b>Thermal Conductivity@25°C</b>	0.11W/m·°C
<b>Expansion Rate 25~150°C</b>	0.00124

The above data is based on standard samples; slight variations may occur between batches. For detailed information, please consult our technical support.

## Physical Properties

Temperature		Density ( $kg / m^3$ )	Viscosity(mPa·s)
°F	°C	liquid phase	liquid phase
-184	-120	1008	98.64
-166	-110	999	51.87
-148	-100	990	30.64
-130	-90	981	19.79
-112	-80	972	13.69
-94	-70	963	10.00
-76	-60	954	7.63
-4	-20	917	3.48
68	20	878	2.10
140	60	841	1.49
212	100	805	1.16
284	140	769	0.96
356	180	733	0.83
428	220	697	0.74
500	260	661	0.67