



Progress with high
technology

MATSUMURA OIL CO., LTD.

SP0000001A(E)

BARREL SILICONE FLUID P SERIES

Phenyl-based cold and heat resistant oil

BARREL SILICONE FLUID P SERIES are colorless clear liquid with a methylphenylpoly-siloxane structure and has excellent thermal stability and oxidative stability.

In addition, since it has a low pour point and low vapor pressure, it can be used for heat transfer fluids, braking liquids, lubricating liquids, etc.

1. Features

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|--|-----------------------------------|
| (1) Colorless clear liquid. | (6) Excellent in shear stability. |
| (2) High viscosity index and small change in viscosity with temperature. | (7) Low surface tension. |
| (3) High flash point and flame retardant. | (8) High water repellency. |
| (4) Vapor pressure is very low and evaporation is small. | (9) Low toxicity. |
| (5) Excellent thermal stability and oxidative stability. | (10) Tasteless and odorless. |
| | (11) Chemically inert. |

2. Typical properties

Property	BARREL SILICONE FLUID	
	P-100	P-400
Max. Temp. (Open system) °C	200	260
Appearance	Colorless clear	Colorless clear
Density 25°C kg/m ³	992	1070
Flash Point (COC) °C	>300	>315
Pour Point °C	<-60	<-30
Kinematic Viscosity 25°C mm ² /s	100	400
Acid Number mgKOH/g	0.01	0.01
Surface Tension 25°C mN/m	24	25
Refractive Index 25°C	1.425	1.505
Viscosity Temperature Coefficient	0.62	0.82
Thermal Expansion Coefficient 1/°C	9.6×10^{-4}	7.3×10^{-4}
Autoignition Temp. °C	482	Approx. 400

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