

Product Data

Methyl Phenyl Silicone Fluid TSF433

TSF433 is a silicone fluid containing diphenylsiloxy units and dimethylsiloxy units in the polymer skeleton. It has excellent high temperature stability and can be used from -30 to +280°C.

KEY PERFORMANCE PROPERTIES

- ◆ Excellent thermal stability, both in closed and open air heating condition
- ◆ Excellent radiation resistance.
- ◆ Transparent liquid: capable of visual check of inside heat transfer fluid

APPLICATION

- ◆ Heat transfer fluid at high temperature condition
- ◆ Release and/or lubrication fluid at elevated temperature condition
- ◆ Radiation durable dumping fluid

TYPICAL PRODUCT DATA

PROPERTIES		
Appearance		Transparent
Specific gravity (25°C)		1.073
Viscosity (25°C)	mm ² /s {cSt}	450 {450}
Weight loss %	150°C, 24h	0.2
	200°C, 24h	0.6
VTC*		0.82
Refractive index (n _D ²⁵)		1.505
Flash point	°C	348
Pour point	°C	<-30
Surface tension (25°C)	mN/m	24.7
Volume expansion	1/K	7.7×10 ⁻⁴
Specific heat (25°C)	J/(g·K)	1.63
Thermal conductivity	W/(m·K)	0.15
Heat resistance	250°C, 1000h	No gelation
	300°C, 48h	No gelation
Radiation resistance	Gy	1×10 ⁶

*VTC (Viscosity Temperature Coefficient) = 1 – Viscosity at 98.9°C / Viscosity at 37.8°C

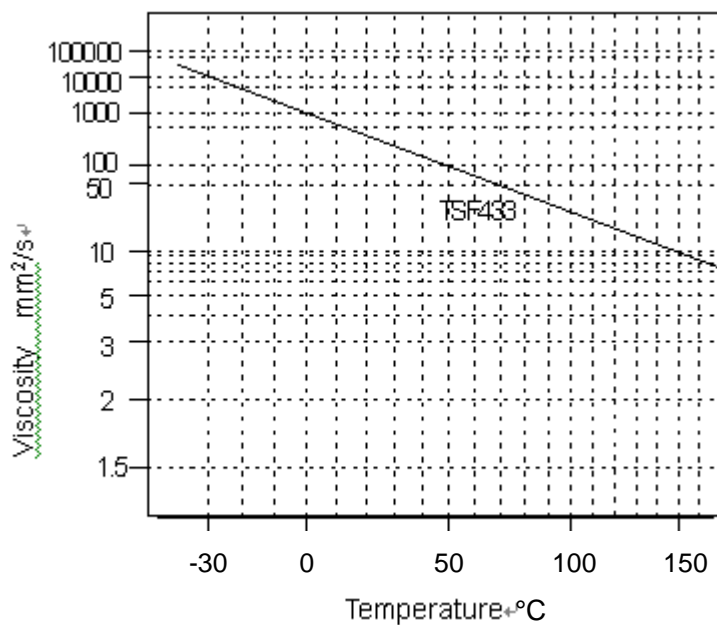
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COMPATIBILITY

GRADE	Dimethyl silicone fluid		Methylphenyl silicone fluid			
	TSF405	TSF451-100	TSF431	TSF433	TSF437	TSF4300
TSF405		○	○	○	○	○
TSF451-100	○		○	×	×	×
TSF431	○	○		×	△	△
TSF433	○	×	×		○	○
TSF437	○	×	△	○		○
TSF4300	○	×	△	○	○	

○: Soluble △: Soluble when TSF431 content is more than 90% ×: Insoluble

VISCOSITY CHANGE WITH TEMPERATURE



HANDLING AND SAFETY

- ◆ Wear eye protection and protective gloves as required while handling the product.
- ◆ Use the product in a well ventilated area

STORAGE

- ◆ Store in a cool, dry place out of direct sunlight.
- ◆ Keep out of the reach of children

PACKAGING

- ◆ 1kg bottle available in case of 10
- ◆ 15kg can available by the can
- ◆ 200kg drum available by the drum

Issued Aug. 2000/2nd revised Nov. 2005, TSF433 E

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