

## Product Data

# Methyl Phenyl Silicone Fluid TSF437

TSF437 is a methyl phenyl silicone fluid, which has been found useful as an internal release agent for transparent or opaque thermoplastic and thermoset resins.

### KEY FEATURES

- ◆ Excellent lubricating and release capabilities
- ◆ Chemically inert

### TYPICAL APPLICATIONS

- ◆ Plastic additive

### TYPICAL PROPERTY DATA

PROPERTIES		
Appearance		Colorless, transparent
Specific gravity (25°C)		1.02
Viscosity (25°C)	mm <sup>2</sup> /s	22
Refractive index (n <sub>D</sub> <sup>25</sup> )		1.499
Flash point	°C	170
Pour point	°C	< -60
Surface tension (25°C)	mN/m	24.2
Dielectric constant (60Hz, 25°C)		2.8
Dissipation factor (60Hz, 25°C)		0.001
Volume Expansion	1/K	8.7×10 <sup>-4</sup>

*Typical property data values should not be used as specifications.*

### 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

## INSTRUCTION FOR USE

A number of approaches for obtaining good dispersion have been used. Generally, TSF437 silicone fluid has been incorporated in polymer system by mechanical addition.

TSF437 silicone fluid has been blended into powder or pellets in a ribbon blender, high intensity blender, or a drum on a tumbler. A master batch with powder made in a high intensity mixer may be let down with additional powder in conventional mixer. A range of 0.01 to 0.5% by weight of TSF437 silicone fluid in the finished pellets has been found useful.

TSF437 silicone fluid has also been added directly to injection molding machines using a small metering pump.

## 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 and dry place out of direct sunlight.
- ◆ Keep out of the reach of children.

## PACKAGING

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

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### **FOR INDUSTRIAL USE ONLY**

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