Product Data Methyl Hydrogen Silicone Fluid for Water Repellent TSF484

TSF484 is a methyl hydrogen silicone fluid, which imparts water repellency to textile materials and others.

STRUCTURAL FORMULA



KEY FEATURES

• Imparts water repellency to a variety of materials such as textiles and powders.

APPLICATIOONS

• Water repellent for textiles, powders, glass, metals

TYPICAL PROPERTY DATA

PROPERTIES		
Appearance		Clear, Water White
Silicone Content,	%	100
Viscosity (25°C)	mm²/s {cSt}	25 {25}
Specific Gravity (25°C)		1.00
Refractive Index (n _D ²⁵)		1.396
Solids content (105°C, 1.5h)	%	97
Methylhydrogensiloxane units	mol %	99

Typical property data values should not be used as specifications

INSTRUCTION FOR USE (Powder treatment)

- 1. Dilute TSF484 with an appropriate solvent such as toluene or hexane to a 10-25% solution
- 2. Add the solution to the powder, as silicone content will be 0.1 to 1,0 weight percent.
- 3. Mix them with a conventional mixer such as ribbon mixer to coat the powder surface uniformly.
- 4. Removing solvent by heating at 60-80°C, heat treat at 150°C for 60 minutes.
- 5. Treating temperature can be lowered by using the following catalysts. Typical level is about 2 % to TSF484.

Stannous octoate, Stannous oleate, Zinc octoate, Zinc naphthoate, Iron octoate

TREATING CONDITION WHEN USING CATALYST

TEMPERATURE	TIME
C°	min
150	3
130	15
100	60

WARNING

- Catalyst should be added to pre-diluted TSF484 to avoid rapid hydrogen-gas generation.
- Pot life of the catalyzed solution, which contains 10-25% TSF484, is about 8 hours at 25°C.
- Since hydrogen gas can be generated by the addition of catalysts or heating, special attention should be paid.
- The catalyzed solution should be not stored in closed container.
- Solvent removal and heat treat processes should be carried out in a well-ventilated area.

HANDLING AND SAFETY

- TSF484 generates flammable gas on contact with acids, bases or oxidizing materials.
- Wear eye protection, protective gloves at all times when working with this product.
- Maintain adequate ventilation in the work place at all times.

STORAGE

- Store in a dark, cool place out of direct sunlight.
- Keep out of reach of children.

PACKAGING

- 1kg bottle available in cases of 10
- 15kg can available
- 18kg pail available
- 200kg drum available

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