

Product Data

Silicone Varnish for Modification TSR160, TSR165

TSR160 and TSR165 are silicone varnishes for organic resin modification to improve heat resistance, weather resistance, water resistance, gloss, electric properties, leveling, and so on.

KEY FEATURES

- ◆ TSR160 is compatible with various organic resins and can be used for blending (cold blend) and modification (cocking).
- ◆ TSR165, low-polymer, has methoxy groups (SiOCH_3) and is widely used for organic resin modification (cocking).

TYPICAL PROPERTY DATA

PROPERTIES	TSR160	TSR165
Appearance	Yellowish, transparent	Yellowish, transparent
Specific gravity (25°C)	1.07	1.13
Viscosity (25°C)	20 mPa·s	80 mm ² /s
Solid content %	60	100
Curing time (150°C) h	1	-
Functional group	-OH (4.5%)	-OCH ₃ (15%)
Molecular weight	-	650
Solvent	Xylene	-

Typical property data values should not be used as specifications

COMPATIBILITY IN COLD BLEND

RESIN	Paint film (Resin:TSR160)		
	70:30	50:50	30:70
Alkyd resin (oil length: 30)	○	○	○
Alkyd resin (oil length: 65)	○	○	○
Acrylic resin	○	○	○
Butylated melamine resin	○	○	○
Epoxy resin (Epikote 828)	○	○	○
Epoxy resin (Epikote 1001)	×	○	○
Epoxy ester resin	○	○	○
Phenolic resin	○	○	○

Polystyrene	×	×	×
TSR117 (Pure silicone)	○	○	○
TSR144 (Pure silicone)	○	○	○
TSR165 (Pure silicone)	○	○	○
TSR175 (Modified silicone)	○	○	○
TSR194 (Modified silicone)	○	○	○

○: Transparent ×: Non-transparent

INSTRUCTIO FOR USE

The suitable content is as shown below, according to purpose.

PURPOSE	CONTENT AS SOLID %	EFFECT
Heat resistance	> 30	Less fading of color
Weather resistance	20-30	Longer product life (2-3 times)
Leveling	1-5	Improved brushing (TSR160)

HANDLING AND SAFETY

- ◆ Wear eye protection and protective gloves when handling the product.
- ◆ Maintain adequate ventilation in the work place at all times.
- ◆ Avoid any source of ignition due to flammability.

STORAGE

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

PACKAGING

TSR160

- ◆ 1kg can available in cases of 10
- ◆ 200kg drum available

TSR165

- ◆ 1kg can available in cases of 10
- ◆ 18kg can available
- ◆ 200kg drum available

FOR INDUSTRIAL USE ONLY

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