Solid Silicone Intermediate LR-TMP10

Descriptions:

This product is a methyl-phenyl silicone resin intermediate containing silanol groups. It has good compatibility and high reactivity and can be blended with acrylic, polyester, and epoxy resins to participate in crosslinking and curing reactions. Organic silicone intermediates can be introduced through blending or polymer modification.

This product has excellent thermal stability, weather durability, compatibility, and strong color and gloss retention. It also demonstrates high reactivity. It can be blended with acrylic, polyester, epoxy, and other organic resins to enhance heat resistance, weather resilience, chalking resistance, and crack prevention. Being solid at room temperature, it is suitable for use in heat- and weather-resistant powder coatings, either by direct addition or compounding.

Typical Technical Properties:

Items	Index	Test method
Appearance	Colorless to light yellow transparent solid	GB1721
Volatile matter %	≤ 3 %	
Softening point (°C)	60- 90	GB/T12007.6-1989
Solubility in toluene(1:1)	Clear and transparent	

Applications

1. Powder Coating Industry – Improves heat and weather resistance with minimal impact on recoating properties compared to other solid silicone resins.
2. Heat-Resistant Industrial Coatings – Typically added directly via compounding. The temperature resistance is significantly influenced by the amount used, with a recommended minimum of ⩾15% (based on effective solid content). More balanced performance can be achieved through polymerization grafting.
3. Weather-Resistant Polysiloxane Coatings – When combined with organic silicone resin, it enhances weatherability and salt spray resistance. It complies with HG/T 4755-2014 standards for polysiloxane coatings.

Package &Storage:

Generally be packed in 50kg plastic inner lining paper drums,sealed stored in a cool and dry environment under 25°C. The shelf life is one year(can still be used if the product is qualified after the expiration date).

Use Reference

When used in compounding, it can be added directly or dissolved in a solvent before being mixed with organic resins to prepare coatings;

For graft modification applications, the reaction process should be verified through the glass test method to ensure complete grafting;

When applied in powder coatings, standard powder coating procedures should be followed.