



## Solid Silicone Resin LR-240/241/242

### Description

This product has excellent heat resistance, weather durability, color retention, gloss preservation, and reactivity. It offers high hardness and strong compatibility. It can be blended with acrylic, polyester, epoxy, and other organic resins to enhance heat resistance, weather resistance, and significantly improve chalking and cracking resistance. As a solid at room temperature, it can be incorporated into heat- and weather-resistant powder coatings through direct addition or compounding.

### Typical Technical Properties:

Items	Index	Test method
Appearance	Colorless to light yellow transparent solid	GB1721
Volatile matter %	$\leq 3 \%$	
Softening point (°C)	60-100	GB/T12007.6-1989
Solubility in toluene (1:1)	Clear and transparent	

### Applications

1. Used in the powder coating industry to enhance heat and weather resistance, with minimal impact on recoating properties compared to other solid silicone resins.
2. Used in heat-resistant industrial coatings, typically added directly through compounding. The effect of different mixing ratios on temperature resistance is crucial, with a generally recommended minimum content of  $\geq 15\%$  (based on effective solid content). More balanced performance can be achieved through polymerization grafting.
3. Used in weather-resistant polysiloxane coatings in combination with organic silicone resin, providing improved weatherability and salt spray resistance.

### 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 this product is compounded used, it can be added directly or dissolved in solvent and then added to organic resin to prepare coating; when it is grafting modified used, the reaction process should be tested by glass test method to ensure entirely grafting. When used as powder coating, it can be carried out according to the general powder coating operation process.