

## XJY-8205

### Methyl MQ silicone resin series

#### --Application of release agent

##### 1. PRODUCT FEATURES

Methyl MQ silicone resin is formed by polymerization of tetrafunctional siloxane (Q) and monofunctional methyl siloxane (M). It is widely used in the fields of personal care, adhesives, defoamers, waterproofing agents, etc., and has a good application effect in the fields of high temperature, semi-permanent or permanent release agents.

In the release agent formula, polydimethylsiloxane is widely used, and a certain amount of MQ silicone resin is added to it. After being coated on the surface of the mold at high temperature, some hydroxyl groups on MQ silicone resin will be condensed to form a reinforcing filling for film formation of dimethylsilicone oil, thus increasing the use temperature of the release agent and increasing the reuse times, thus improving the production efficiency of downstream customers and reducing the production cost.



## 2.TYPICAL PROPERTIES

### 1.Methyl MQ silicone pure powder

Item name	Methyl MQ resin		
Resin item	XJY-8205-01	XJY-8205-02	XJY-8205-03
Appearance	White powder		
Molecular weight (g/mol)	2500-4000	4000-6000	4000-6000
M/Q ration	0.8-1.0	0.8-1.0	0.6-0.7
Hydroxyl range of resin	1.5-2.5%	1-2%	0.3-0.8%
Hydroxyl range of resin	50 Microns		

### 2.Methyl MQ silicone resin solution dissolved in toluene/xylene

Item name	Methyl MQ silicone resin solution		
Resin item	XJY-8205M-01	XJY-8205M-02	XJY-8205M-03
Appearance	Colorless transparent liquid		
Molecular weight (g/mol)	4000-6000	4000-6000	4000-6000
Solvent	Toluene/xylene		
M/Q ration	0.6-0.7	0.8-1.0	0.6-0.7
Hydroxyl range of resin	0.3-0.8%	1-2%	0.3-0.8%
solid content	75%	75%	60%

### 3. Methyl MQ silicone resin solution dissolved in PMDS (polydimethylsiloxane)

<b>Item name</b>	Methyl MQ resin		
Resin item	XJY-8205N-01	XJY-8205N-02	XJY-8205N-03
Appearance	Colorless transparent liquid		
Molecular weight (g/mol)	4000-6000	4000-6000	4000-6000
dispersion medium	Polydimethylsiloxane		
M/Q ration	0.6-0.7		
Hydroxyl range of resi	0.3-0.8%		
Resin content	40%		
Viscosity (mPa.s)	2500-3500	5000-7000	800-1200

### 4. Water-based MQ silicone resin product parameters

<b>Item name</b>	Water-based MQ silicone resin	
Resin item	XJY-8331w	XJY-8205w
Appearance	Milky white translucent liquid	
dispersion medium	Water	
Resin content	50%	

### **3.Application**

Silicone mold release agents have the characteristics of high and low-temperature resistance, low surface tension, and no corrosion to metals. Adding MQ silicone resin (5-15%) can significantly increase the strength of silicone oil film, and has good application effects in high-temperature castings, tire demoulding, car seat cushions and other fields.

Remarks: Jiangxi Xinjiayi New Material Co., Ltd. is currently conducting a pilot test of water-based resin and has made good progress. By grafting hydrophilic groups on the resin, it has realized that no additional emulsifier is added and no mechanical emulsification is required for water. The purpose of decentralization. In the application field of water-based mold release agents, the adverse effects of beneficial emulsifiers on the mold release process can be avoided.

### **4.MQ resin modified release agent has the following characteristics**

- Easy to use, high temperature resistant
- Will not cause the molded part to fade
- Can be diluted with solvent
- Has low surface tension
- In most cases, it can be demolded in multiple molding cycles after one use.

Semi-permanent demolding

- Can form a thermally stable, non-carbonized, non-oily release film

### **5.PACKAGING**

XJY-8205 powder series are available in 25Kg cardboard drums, and XJY-8205 liquid series are available in 50Kg or 200Kg iron drums, which can be customized if you have special requirements.

## **6.STORAGE AND TRANSPORTATION**

When stored at or below 25°C in the original unopened containers, this product has usable life of 12 months from the date of production. If more than the storage period, the product should be rechecked.

## **7.PRECAUTIONS**

- ◆ This series of product pH value is neutral. If on skin(or eyes), flush with water, and get medical attention immediately.
- ◆ This product is neither tested nor represented as suitable for medical or pharmaceutical use.
- ◆ Product safety information required for safe use is no included. Before handling, read product and safety date sheets for safe use.