

XJY-8205D Silicon Resin for Defoamer

1. PRODUCT FEATURES

XJY-8205D MQ Silicone Resin is a polycondensate from four functional group siloxane(Q) and One functional group methyl siloxane(M), the molecular structure of M and Q chain ratio and the structural nature of the M decision resin applications. XJY-8205D is blended with linear polysiloxane and other raw materials to form a silicone polymer with a certain degree of cross-linking. It has a good application effect on defoaming in industries such as printing and dyeing, water treatment, petroleum exploration, and paper making.

2. TYPICAL PROPERTIES

Item	XJY-8205D
Appearance	White Powder
Solid content%	>98.5
Molecular weight (g/mol)	4000-7000
M/Q ration	0.6-0.8
Bulk density (g/cm ³)	0.25-0.4

3. Application

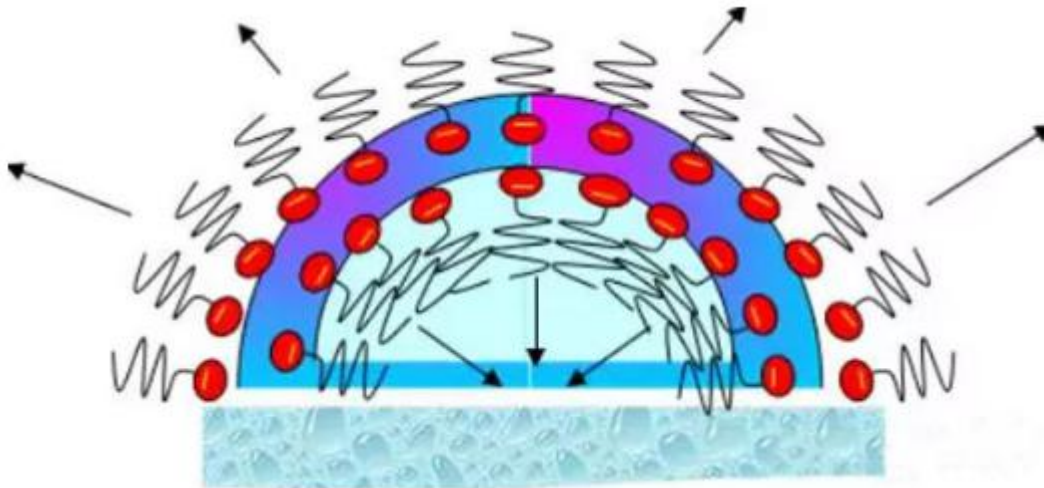
It is easy to generate bubbles in the progress of production and use of coating. A large number of stable bubbles are not conducive to the smooth production of coatings and the effect and performance of coatings during application. Therefore, it's necessary to add defoamer to defoaming.



The cause of generating foams:

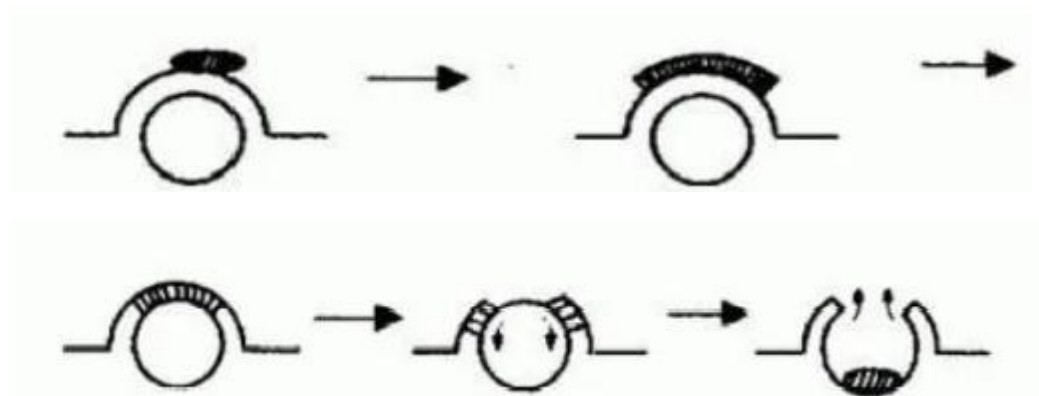
Various additives are added to the coating formulation, such as additives to help the wetting and dispersing of pigments and fillers, additives to adjust the appearance of the paint film, and additives with special functions. Most of the above-mentioned additives are surfactant, which can change the surface tension of paint, resulting in the existence of inner factors such as blister or foam stability. All kinds of high-speed mixing equipment, such as disperser and sand mills, are

used in the process of coating production. All kinds of construction methods, such as air spraying, airless spraying, roller coating and blush coating, are applied to the coating process. All these production and construction processes will increase the free energy of the coating system in different extent and help generate foam, which is the external factors of generating foams.



The liquid reflux phenomenon causes the bubbles to form a stable state, counteracting the restraining effect of gravity on the bubbles, the electrostatic repulsion of surfactant can thicken the membrane of the bubbles, making it more difficult to break.

The defoamer works at or after the formation of the foam thin layer: the defoamer penetrates into foam elastic film and is distributed in the film, causing the thin layer to rupture through the reduction of surface tension; or foaming the monomolecular film decrease its adhesion, making it easy to break the thin layer; the hydrophobic particles in the defoamer reach the surface of the thin layer and absorb surfactant at the top of the thin layer, causing the thin layer break due to the absence of surfactant.



1. Contacting with defoamer→2. Molecule diffusion→3. Molecules enter into the bubble film→4. Bubble film thinning→5. Bursting

Our MQ resin is used with the defoamer system of white carbon black and dimethyl silicone oil, 8%-12% resin addition ratio. On the basis of the basic defoamer, MQ resin, silicone oil and silica molecules form a more stable structure and improve the foam inhibition performance. Moreover, this stable structure improves the defoaming performance, improves acid resistance and high temperature resistance of the defoamer. While improving the defoaming performance, the interlocking structure protects the active components of dimethylsiloxane silica system from high temperature and acid-base.

Formula suggestion:

8%-12% resin addition ratio, dimethyl silicone oil and white carbon black as the main active defoaming ingredients, this formula improves the defoaming performance, improves the defoamer's high temperature resistance, acid and alkali resistance, and improves defoaming. The suitability and stability of the agent.

One of the materials of organosilicon defoamer, it acts on the dimethyl silicone oil white carbon black system to improve the defoaming performance, improve the temperature and acid resistance of the defoamer, and maintain the activity of the active ingredients.

- Improve the high temperature resistance of defoamer.
- Improve the strong alkali resistance of defoamer.
- Improve the defoaming performance of defoamer.
- High-performance silicone defoamer, synthetic silicone grease is recommended to add 8-12% of MQ resin, which significantly improves the antifoam performance of the defoamer;



4.PACKAGING

XJY-8205D packed in plastic bags or cartons for 25 kg.

5.STORAGE AND TRANSPORTATION

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

6.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.