



JIANGXI HITO SILICONE MATERIALS CO.,LTD

No 6 Tianhong road,Xinghuo

industry zone,Yongxiu,

Jiujiang,Jiangxi province,China

(86)792-3170318(Tel) (86) 792-3170355 (Fax)

## TECHNICAL DATA SHEET

# H-8806

## Organosilicone adjuvant

CAS:134180-76-0

### DESCRIPTION

**H-8806** organosilicone adjuvant is a superspreading surfactant based on a trisiloxane alkoxyate. **H-8806** organosilicone adjuvant lowers the surface tension of spray solutions, beyond that which is achievable with conventional adjuvants.

Typically, **H-8806** organosilicone adjuvant (@ 0.1 wt %) gives an aqueous surface tension of ~22 mN/m. On the other hand, an octylphenol ethoxylate containing 10 EO units (a commonly used nonionic surfactant) at 1.0 wt % gives a surface tension of only 30 mN/m.

The bottom line? **H-8806** organosilicone adjuvant helps lower the aqueous surface tension more effectively than conventional organosilicone adjuvants.

Because **H-8806** organosilicone adjuvant is a superspreading surfactant, the contact angle of spray solutions on leaf surfaces is reduced, leading to an increase in spray coverage (Figure 1).

### Key Features and Benefits

Superspreader

Helps improve rainfastness

Promotes rapid uptake of agrochemicals

Promotes spray volume reduction

Low pour point for low temperature applications

Low foaming

Nonionic

Figure 1: Spreading

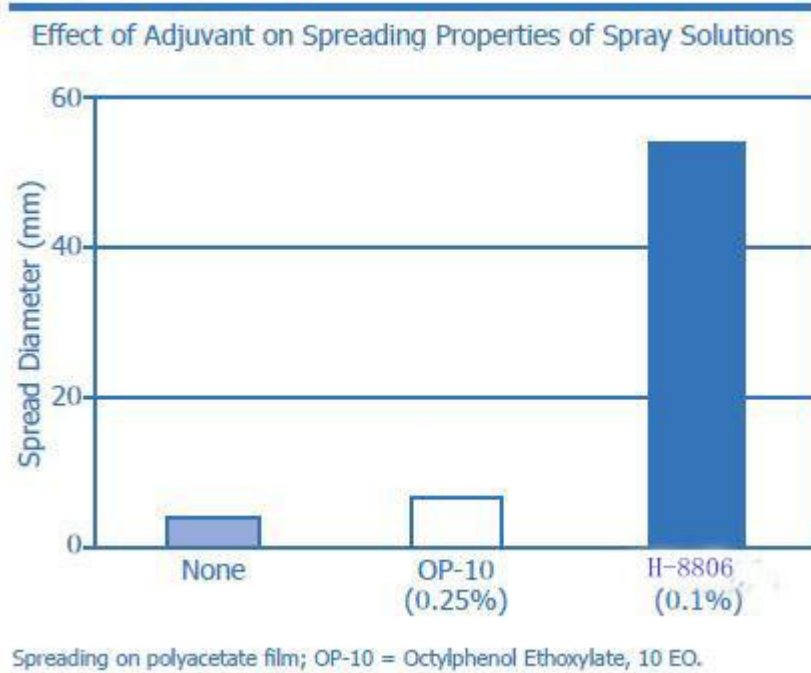
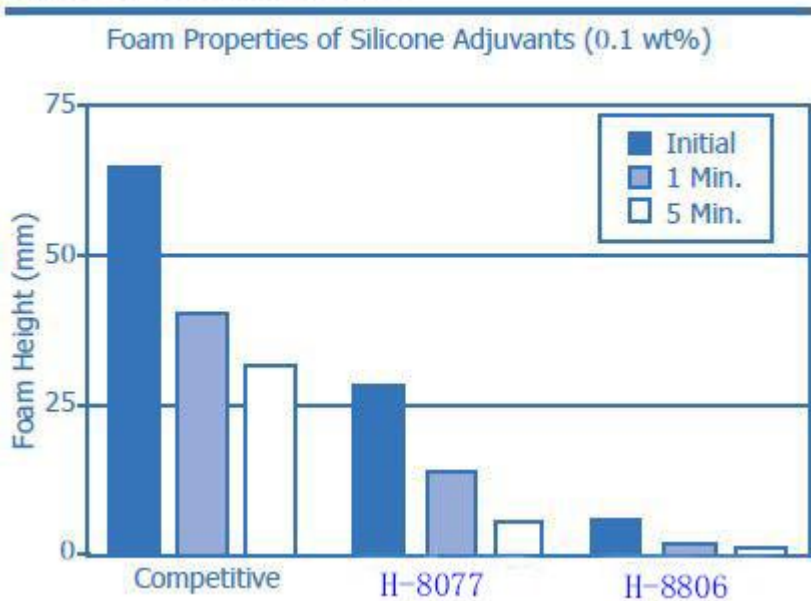


Figure 2: Foam Properties



Additionally, under specific conditions, **H-8806** organosilicone adjuvant promotes rapid uptake of agrochemicals into plants via stomatal infiltration. Spray solutions taken into plants in this way become rainfast, thereby improving application reliability.

The low foam properties of **H-8806** organosilicone adjuvant may make it easier to handle than other organosilicone based spreading agents (Figure 2).

**H-8806** organosilicone adjuvant is nonionic in nature, making it useful with a broad range of agrochemical formulations.

### **TYPICAL PROPERTIES**

Surface Tension, mN/m (0.1 wt%) (a)	<21.5
Viscosity (cps) (b)	20-50
Specific Gravity (25/25°C)	1.003
Cloud Point (0.1 wt %), °C	<10
Flashpoint, PMCC °C (°F)	143

(a) Surface Tension by Wilhelmy Plate Method.

(b) Pensky-Martens Closed Cup, ASTM Method D93.

### **USES AND APPLICATION**

**H-8806** organosilicone adjuvant has been used successfully in spray applications globally.

Typical applications include

Application	Typical Use Rate <sup>(a)</sup>
Plant Growth Regulators	0.025% to 0.05%
Herbicide	0.025% to 0.15%
Insecticide	0.025% to 0.1%
Fungicide	0.015% to 0.05%
Fertilizers and Micronutrients	0.015% to 0.1%

(a) Note: use rates are dependent on crop, agrochemical and spray volume requirements.

### **In Agrochemical Formulations**

**H-8806** organosilicone adjuvant may be used as a component in agrochemical formulations. Although organosilicone surfactants are subject to hydrolysis under acidic or basic conditions, optimum performance is achieved by buffering the formulation to pH 6.5 -7.5. Additionally, it is recommended that Silwet 806 organosilicone adjuvant be used at a concentration of at least 5%, based on the total formulation.

### **As A Tank Mix Adjuvant**

**H-8806** organosilicone adjuvant, when used as a tank-side adjuvant may be used to improve spray coverage, improve uptake or to allow for a reduction in spray volume. **H-8806** organosilicone adjuvant is most effective as a tank-side adjuvant when spray mixtures are 1) within a pH range of 5-8, and 2) used within 24 hours of preparation.

High spray volumes, coupled with high surfactant rates, are not required to achieve sufficient coverage with **H-8806** organosilicone adjuvant. In fact, **H-8806** organosilicone adjuvant may provide adequate coverage in many low volume spray applications at rates between 0.025% and 0.1%.

### **SAFETY**

Before handling, read the Material Safety Data Sheet and container label for safe use, physical and health hazard information.

### **STORAGE AND SHELF LIFE**

After sealing packaging products stored in a cool, dry place , **H-8806** has a shelf life of 36 months from date of manufacture.

### **PACKAGING**

**H-8806** is available in 200L drum and 1000L IBC or others.

### **LEGAL DISCLAIMER**

Hito chemical believes that the information in this technical data sheet is an accurate description of the typical uses of the product. Hito Chemical , however, disclaims any liability for incidental or consequential damages, which may result from the use of the product that are beyond its control. Therefore, it is the user's responsibility to thoroughly test the product in their particular application to determine its performance, efficacy and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual property right.



is a registered trademark of Hito chemical , China.