

## SiSiB® ASS8212 Superspreader for Agricultural Applications

### COMPONENT

Polyalkyleneoxide Modified Heptamethyltrisiloxane

### INTRODUCTION

SiSiB® ASS8212 spray adjuvant is a non-ionic polyether-modified silicone surfactant that significantly reduces surface tension and contact angle, promoting rapid spreading and deep penetration of agrochemicals. It enhances stomatal uptake, improves rainfastness, reduces pesticide waste, and minimizes environmental pollution.

### FEATURES & BENEFITS

- Ultra-low surface tension for rapid spreading
- Enhances stomatal absorption and systemic uptake
- Increases pesticide coverage and efficacy
- Reduces spray volume and water consumption
- Improves rainfastness and cold resistance
- Decreases residue and environmental burden
- Non-toxic and environmentally friendly

### PHYSICAL PROPERTIES

CAS No.	67674-67-3
Flash Point	>140°C
Color and Appearance	Colorless to straw liquid
Surface Tension (0.1%, mN/m))	<20.5
Viscosity (25°C, cSt)	25-45
Cloud Point (0.1 wt%)	<10°C

### APPLICATIONS

SiSiB® ASS8212 is ideal for both in-formula use and tank-mix additions in a wide range of crop protection solutions. It is particularly effective in herbicides for enhancing spreading and penetration on waxy surfaces, in insecticides and fungicides to improve coverage and uptake, and in foliar-applied nutrients and PGRs for optimal delivery through leaf stomata.

### USAGE GUIDELINES

#### As Tank Mix Adjuvant

SiSiB® ASS8212 is used to improve spray coverage, improve uptake or to reduce spray volume. It is the most effective as a tank-side adjuvant when spray mixtures are (i) within a PH range of 6-8, and (ii) prepare the spray mixture for immediately use or within 24h preparation.

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SiSiB® ASS8212 achieves full performance at very low use-levels, often 0.1 to 0.5% will be sufficient. Once the full performance of SiSiB® ASS8212 has been reached, a further increase in the silicone surfactant concentration will show no effect. We recommend testing first at a concentration of 1% and afterwards lowering the SiSiB® ASS8212 concentration to the point at that still full performance is achieved. In general, the amount is as follows:

Plant promote regulator:	0.025%-0.05%
Herbicide:	0.025%-0.15%
Pesticide:	0.025%-0.1%
Bactericide:	0.015%-0.05%
Fertilizer and trace element:	0.015%-0.1%

When using, dissolve the pesticide first, add SiSiB® ASS8212 after the uniform mixture of 80% water, then add water to 100% and mix them uniformly. It is advised that when using Agricultural Silicone Spreading and Penetrating Agent, the water amount reduced to 1/2 of the normal (suggested) or 2/3, average pesticide usage reduced to 70-80% of the normal. Using the small aperture nozzle will quicken the spray speed.

### In Agrochemical Formulations

When the product added to the original pesticide, we suggest the amount is 0.5%-8% of the original pesticide. Adjust the PH value of the pesticide prescription to 6-8. If the liquid mixtures is PH=5-6 or PH=8-9, the surface activity lows down obviously after being laid aside for 24h. Although silicone surfactants are subject to hydrolysis under acidic or basic conditions, optimum performance is achieved by buffering the formulation to pH 6.5-7.5.

The user should adjust the amount of Agricultural Silicone Synergistic Agent SiSiB® ASS8212 according to different kinds of pesticide and prescription to reach the most effective and most economical result. Do compatibility tests and stepwise tests before usage.

### PACKING

SiSiB® ASS8212 is supplied in 200Kg barrel or 1000Kg IBC tote.

## SiSiB<sup>®</sup> ASS8212 Superspreader for Agricultural Applications

### HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

### STORAGE

In the unopened original container SiSiB<sup>®</sup> ASS8212 has a shelf life of two years in a dry and cool place.

### NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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