Technical Data Sheet

Silwet™ 408 Super Spreader

Description

Silwet 408 super spreader is a trisiloxane ethoxylate based adjuvant that lowers the surface tension of spray solutions beyond that which is achievable with conventional nonionic surfactants.

Key Features and Typical Benefits

- Super spreader for soluble liquid and emulsifiable concentrate formulations
- Promotes spray volume reduction
- Promotes rapid uptake of agrochemicals (rainfastness)
- Can significantly improve spray coverage
- Nonionic
- Meets EPA 40 CFR §180.910 requirements(1)
- OMRI Listed for organic use

Typical Physical Properties

Property	Value
Surface Tension mN/m (0.1% wt%)(a)	21.5
Cloud Point (0.1 wt%), °C	<10
Viscosity (cSt at 25 °C)	35
CMC (Wt%)(b)	0.007
Pour Point, °C	-8
Specific Gravity at 25 °C	1.020
Flash Point(c), °C (°F)	118 (244)

Typical properties are average data and are not to be used as or to develop specifications.

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Potential Applications and Use Rates

Application	Typical Use Rate
Fertilizers and Micronutrients	0.015% to 0.1%
Fungicide	0.015% to 0.1%
Herbicide	0.025% to 0.15%
Insecticide	0.025% to 0.1%
Plant Growth Regulators	0.025% to 0.1%

Use rates are dependent on crop, agrochemical and spray volume requirements.

1. The components meet the requirements of U.S. regulation EPA 40 CFR §180.910, and therefore are exempt from tolerances when used as an inert ingredient in agricultural applications in accordance with the other conditions of that regulation
    1. Surface tension by Wilhelmy Plate Method
    2. Critical Micelle Concentration
    3. Pensky-Martens Closed Cup, ASTM Method D93

General Conditions for Use

In Agrochemical In-Can Formulations

Silwet 408 super spreader 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 to 7.5. Additionally, it is recommended that Silwet 408 super spreader be used at a concentration of at least 5%, based on the total formulation.

As a Tank-Mix Adjuvant

Silwet 408 super spreader, 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. Silwet 408 super spreader is most effective as a tank-side adjuvant when spray mixtures are within a pH range of 5 to 8 and used within 24 hours of preparation.

High spray volumes, coupled with high surfactant rates, are not required to achieve sufficient coverage with Silwet 408 super spreader. In fact, it has the potential to provide adequate coverage in many low volume spray applications at rates between 0.025% and 0.1%.

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Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

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