

WynSpread*SW-248 Superwetting Spray Adjuvant for Agricultural Applications



Key Features and Typical Benefits

- Nonionic
- Superspreader for soluble liquid and emulsable concentrate formulations
- Very low surface energy.
- Rapid spreading and wetting.
- Improve spray coverage
- Promotes rapid uptake of agrochemicals(rain fastness)
- Reduces the residues of pesticides

Applications

It is a type of low viscosity silicone polyether copolymer liquid used to enhance the performance of wetting, spreading and penetration of agricultural chemicals. It may be used as a formulation ingredient in water-soluble broadleaf herbicides and insecticides, fungicides and plant growth regulators, or as a tank-mix adjuvant for foliar-applied chemicals.

Typical properties

Appearance: Clear, light-yellow liquid

Viscosity(25°C): 25-50 cs

Cloud point (1.0%): <10°C

VOC(3h/105°C): ≤3.0%

Surface tension (0.1% aq/25°C.): ≤21.3 mN/m

Performances:

SW-248 Silicone Surfactant reduces the surface tension of aqueous agricultural mixtures significantly lower than is achievable with conventional nonionic surfactants. At concentrations as low as 0.01 percent, SW-248 Silicone Surfactant reduces surface tension below 23 dynes/cm, which produces very rapid wetting and spreading on hard-to-wet surfaces such as waxy leaves.

In addition to the rapid wetting and spreading, SW-248 Silicone Surfactant also greatly increases the uptake of chemicals into plant tissues. Adding SW-248 Silicone Surfactant to a herbicide tank-mix may significantly enhance its efficacy, particularly in the control of broadleaf weeds with water-soluble herbicides. The rapid uptake produces “rainfastness”; i.e., herbicides are not washed off by rainfall because they have penetrated into the plant surface.

How to Use in Agricultural Chemical Formulations:

SW-248 Silicone Surfactant may be used as an ingredient in formulations, provided all the ingredients are compatible. SW-248 Silicone Surfactant is stable in neutral aqueous formulations (pH=6.5-7.5), but will degrade rapidly in acidic or alkaline formulations. New product formulations should be thoroughly tested for performance and shelf stability before entering market.

As an Agricultural Chemical Tank-Mix Adjuvant

SW-248 Silicone Surfactant may be added to tank-mixes to enhance the biological performance of the spray solution.

Application	Typical use rate
Plant growth regulators	0.03-0.05%
Herbicides	0.03-0.15%
Pesticides	0.03-0.1%
Fungicides	0.02-0.05%
Fertilizer and micronutrients	0.02-0.1%

Test a small area first to ensure that crop damage does not occur. Use the additive according to manufacturers' label recommendation.

Usable Life and Storage

When stored below 40°C (104°F), SW-248 Silicone Surfactant has a shelf life of 36 months from date of manufacture.

Packaging

SW-248 Silicone Surfactant is available in 25 kg pails, 200 kg drums and 1000 kg tote-bins.

Product Safety

When considering the use of any Top Win products in a particular application, review our latest Safety Data Sheets and ensure that the use intended can be accomplished safely. For Material Safety Data Sheets and other product safety information, contact the Top Win sales office nearest you. Before handling any of the products mentioned in the text, please obtain available product safety information and take necessary steps to ensure safety of use.