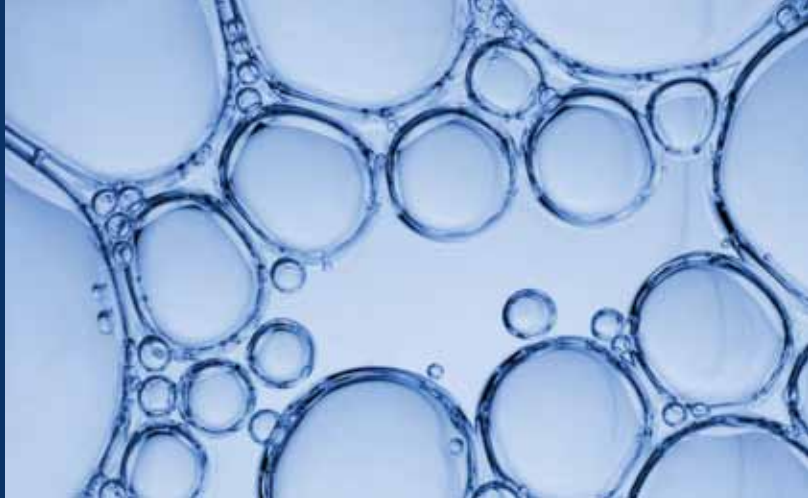


SAG* 1538 Silicone Antifoam Emulsion



MARKETING BULLETIN

SPECIALTY FLUIDS - AGRICULTURE

SAG 1538 silicone antifoam is a highly potent silicone antifoam that uses new silicone materials to provide excellent foam control. This 100% active material is designed for use in a broad range of foaming systems. Compared to common silicone defoamers, SAG 1538 silicone antifoam can provide an exceptional initial foam control when first applied to a foaming system. Additionally, SAG 1538 silicone antifoam has the ability to maintain its foam control properties for longer periods, as a result it can be used at lower use levels than conventional silicone antifoams. It is particularly effective when used as the foam control agents in hard to defoam surfactant concentrates that contain a high level of organic surfactants and those that contain electrolytes.

Key Features and Typical Benefits

- 100% actives
- High antifoam potency in the majority of foaming systems
- Rapid defoaming when the antifoam is initially applied to the foaming system
- Long lasting foam inhibition
- Performs well over a broad pH range
- Meets EPA 40 CFR §180.910 requirements⁽¹⁾

Typical Physical Properties

Appearance	Opaque, oily viscous liquid
Actives Content, %	100
Viscosity 25 °C (LVT No 4, 12 rpm), cP	5,000
Specific Gravity	≈ 1.0

Potential Use in Agrochemical Products

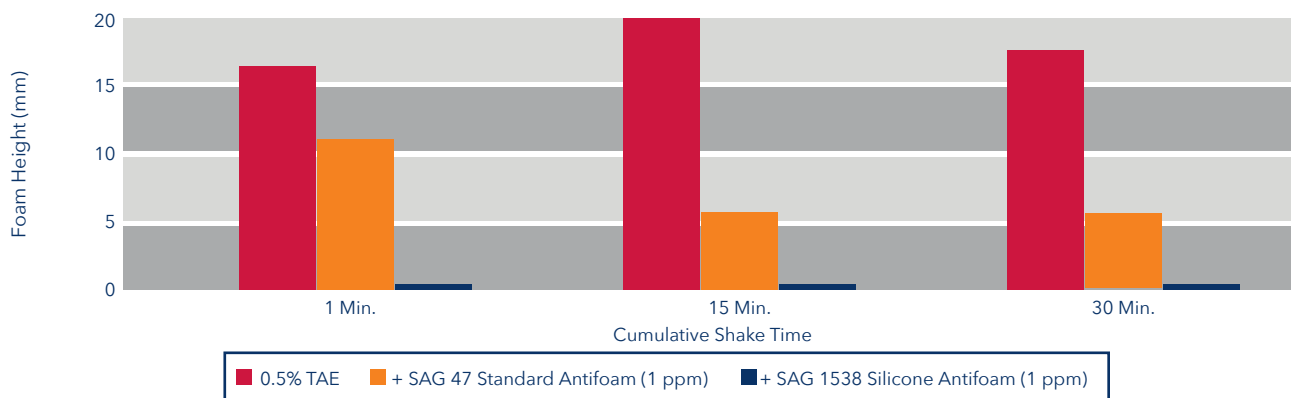
SAG 1538 silicone antifoam is 100% active that is not immediately dispersible in water. However, it can be easily incorporated into surfactant concentrates, using the surfactants within the system to stabilize the antifoam within the formulation. When SAG 1538 silicone antifoam is added to these concentrates, apply slow to moderate agitations to ensure a complete and homogenous dispersion of the antifoam. The final formulation that incorporates SAG 1538 silicone antifoam must be validated to ensure that the silicone actives do not migrate within the formulation as this can influence the uniformity of the foam control when these formulations are stored for prolonged periods.

The use levels for SAG 1538 silicone antifoam when used in the final foaming system will be dependent upon the nature of the foaming system and/or the agitation that causes the generation of the foam. A recommended starting point is addition of sufficient SAG 1538 silicone antifoam that would give between 5 ppm and 20 ppm of antifoam (as received) in the final foaming formulation.

Performance Data

SAG 1538 silicone antifoam can offer outstanding defoaming performance in many pesticide formulations. Figure 1 illustrates the shake test results with the foam height observed at 1, 15 and 30 minutes after shaking. These test data demonstrate that SAG 1538 silicone antifoam at 1 ppm, virtually eliminates all foaming in a Tallow Amine Ethoxylate (TAE, 15 EO) Ag formulation, while other standard antifoams will only reduce foaming levels. Figure 2 visually illustrates this outstanding defoaming performance. In addition, SAG 1538 silicone antifoam is easily dispersed in many non-aqueous systems, avoiding phase separation associated with typical antifoam components (Figure 3).

Figure 1: SAG 1538 Silicone Antifoam Performance in 0.5% Tallow Amine Ethoxylate (TAE) Formulation



Note: Test data. Actual results may vary.

Figure 2: SAG 1538 Silicone Antifoam Defoaming in Tallow Amine Ethoxylate (0.5%)



Note: Test data. Actual results may vary.

Figure 3: SAG 1538 Silicone Antifoam Dispersibility in Tallow Amine Ethoxylate



Note: Test data. Actual results may vary.

Patent Status

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Customer Service Centers

Worldwide

4information@momentive.com

T +1 614 986 2495

T +1 800 295 2392

**North America
Silicones**

T +1 800 332 3390

**Consumer Sealants/
Construction Sealants
and Adhesives**

T +1 877 943 7325

Latin America**South America**

T +55 11 4534 9650

**Mexico and Central
America**

T +52 55 2169 7670

**Europe, Middle East,
Africa and India**

T +00 800 4321 1000

T +40 21 3111848

Pacific**China**

T +800 820 0202

T +86 21 3860 4892

Japan

T +0120 975 400

T +81 276 20 6182

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T +82 2 6201 4600

Malaysia

T +60 3 9206 1532

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