SAG* 1572

Description
The new SAG 1572 silicone antifoam emulsion is a high performance foam control agent, using recent advances in silicone technology.

SAG 1572 silicone antifoam emulsion provides excellent initial foam control as well as the ability to maintain foam control properties over longer periods compared to other silicone antifoams. As a result, SAG 1572 silicone antifoam emulsion can be used at lower use levels than conventional silicone antifoams.

SAG 1572 silicone antifoam emulsion can be evenly dispersed in water-based agricultural formulations and surfactant concentrates, yielding mixtures with excellent storage stability. In these blends, SAG 1572 silicone antifoam emulsion provides excellent foam control in a wide pH range, over a long period.

SAG 1572 silicone antifoam emulsion is very effective in many agricultural applications, as foam control agent for pesticides, during production, packaging and spray tank operations.

Key Features and Benefits

- High defoaming performance
- Excellent ability to manage difficult-to-control foaming systems
- Rapid defoaming when the antifoam is initially applied to the foaming system
- Long lasting foam inhibition
- Easy and rapid dispersal in aqueous systems and surfactant concentrates
- Performs well over a broad pH range

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• Meets EPA 40CFR§180.920

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Opaque liquid</td>
</tr>
<tr>
<td>% Solids Content</td>
<td>33</td>
</tr>
<tr>
<td>% Actives Content</td>
<td>20</td>
</tr>
<tr>
<td>Viscosity 25°C (LVT No 3, 30 rpm), cP</td>
<td>1200</td>
</tr>
<tr>
<td>Emulsifier System</td>
<td>non-ionic</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.0</td>
</tr>
<tr>
<td>pH</td>
<td>8</td>
</tr>
</tbody>
</table>

Product Usage

SAG 1572 silicone antifoam emulsion is a medium viscosity silicone antifoam emulsion that is an excellent candidate for commercial use in both water-based systems and surfactant concentrates. It can therefore be added directly to these systems without pre-dilution and mixed with slow to moderate agitation to ensure a complete and homogenous dispersion.

The addition levels of SAG 1572 silicone antifoam emulsion, when used in the final foaming system, will be dependent upon the nature of the foaming system and the type of agitation generating the foam. A recommended starting point is addition of sufficient SAG 1572 silicone antifoam emulsion that would give between 1 ppm and 50 ppm of antifoam (based on % solids) into the final foaming formulation.

As with any water-based formulation, it is recommended to confirm that the foam control agent remains dispersed once added to the pesticide formulation.

Processing Recommendations

SAG 1572 silicone antifoam emulsion provides a high level of performance in pesticide formulations. Figure 1 illustrates the shake test results with the foam clear break times corresponding to increasing shake time intervals. This figure demonstrates that, even at lower use levels than typically practiced with conventional antifoam agents, SAG 1572 silicone antifoam emulsion provides excellent performance in a commercial glyphosate formulation. Additionally, SAG 1572 silicone antifoam emulsion provides much improved durability; SAG 1572 silicone antifoam emulsion maintains high
performance even after 60 minutes of agitation, while larger concentrations of standard antifoam agents start losing activity after 15 minutes.

Figure 1: Antifoam Efficiency in 2.5% Glyphosate Formulation

![Bar chart showing clear break time for SAG 1572 Silicone Antifoam, Standard Antifoam at 0.5 ppm, Standard Antifoam at 5 ppm, and Standard Antifoam at 50 ppm over cumulative shaking times of 1 min, 15 min, 30 min, and 60 min.]

**Dispersibility**

Effective dispersibility in agrochemical formulations is an issue with conventional foam control agents. However, the new SAG 1572 silicone antifoam emulsion offers much improved compatibility with many adjuvants and "In-can" pesticide formulations. Figure 2 illustrates the dispersion stability of SAG 1572 silicone antifoam emulsion in a typical non-ionic surfactant based adjuvant system. In this example, SAG 1572 silicone antifoam emulsion remains homogeneously dispersed for greater than two months, while typical foam control agents show significant signs of separation after a few days.

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Figure 2: SAG 1572 silicone antifoam emulsion at 0.3% use level in a non-ionic spray adjuvant formulation.

Patent Status
Standard copy to come

Product Safety, Handling and Storage
Standard copy to come

Limitations
Standard copy to come

Contact Information
For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: www.momentive.com

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