Silwet* Eco Spreader
Silwet© Eco Spreader

Description
Silwet ECO Spreader water reducing adjuvant is a low foaming activator spreader used in agriculture. It is listed by the Organic Materials Review Institute (OMRI) for use in organic production. Silwet ECO Spreader water reducing adjuvant helps reduce the surface tension of spray solutions beyond what can be achieved with conventional adjuvants, to allow lower spray volumes and related pesticide application costs.

Silwet ECO Spreader water reducing adjuvant is a superspreading surfactant that can quickly reduce the contact angle of spray solutions on foliar surfaces, thereby promoting increased surface coverage (Figure 1).
This increase in spray coverage means that water requirements may be significantly reduced up to 70% of “spray to run-off” volumes in many crop applications. This makes Silwet ECO Spreader water reducing adjuvant a great choice to consider when water conservation and pesticide application costs are important.

The low foaming properties of Silwet ECO Spreader water reducing adjuvant typically make it much easier to handle than other activator-spreader adjuvants (Figure 2).
Key Features and Benefits

- Superspreader for improved coverage
- Potential for 25-75% lower spray volumes and costs
- Effective with most low temperature applications
- Low foaming
- Nonionic
- Meets requirements for EPA 40CFR§180.910

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Tension (0.1%), mN/m</td>
<td>21.5</td>
</tr>
<tr>
<td>Cloud Point (0.1wt%), °C</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Critical Micelle Concentration (wt%)</td>
<td>0.003</td>
</tr>
<tr>
<td>Pour Point, °C</td>
<td>-50</td>
</tr>
<tr>
<td>Viscosity @ 25°C, cps</td>
<td>22</td>
</tr>
<tr>
<td>Flash Point, PMCC, °C</td>
<td>143</td>
</tr>
<tr>
<td>Specific Gravity @ 25°C</td>
<td>1.002</td>
</tr>
</tbody>
</table>

Potential Applications
Applications | Typical Use Rates\(^{(a)}\)
---|---
Plant Growth Regulators | 0.025% to 0.05%
Herbicide | 0.025% to 0.15%
Insecticide | 0.025% to 0.1%
Fungicide | 0.025% to 0.15%
Fertilizers & Micronutrients | 0.015% to 0.1%

(a) Note: use rates are dependent on crop, agrochemical and spray volume requirements.

**Product Usage**

**In Agrochemical Formulations**

Silwet ECO Spreader water reducing adjuvant may be used as an effective adjuvant 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 6.5-7.5. Additionally, it is recommended that Silwet ECO Spreader water reducing adjuvant be used at ~5% concentration, based on the total formulation.

**As a Tank Mix Adjuvant**

Silwet ECO Spreader water reducing adjuvant when used as a tank-side spray adjuvant may be used to lower spray application volumes. Silwet ECO Spreader water reducing adjuvant is most effective as a tank-side adjuvant when spray mixtures are 1) within a pH range of 5-8, and 2) used within 24 hours of preparation.

High spray volumes, coupled with high surfactant rates, are not generally required to achieve sufficient coverage with the Silwet ECO Spreader water reducing spray adjuvant. In fact, the Silwet ECO Spreader water reducing spray adjuvant may provide adequate coverage in many low volume spray applications at rates between 0.025% and 0.1%.

**Patent Status**

Technical subject matter in this publication is described and protected by one or more of the following U.S. Patents and their foreign counterpart patents and/or patent applications: U.S. Patent No. 5,504,054. Other U.S. and foreign patents and/or patent applications not listed covering the subject matter may be relevant.
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

DISCLAIMER:

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and
perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier’s standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

*Silwet is a trademark of Momentive Performance Materials Inc.

Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.