

# Silwet\* STIK 2

Spreader-Sticker Agricultural Adjuvant





# MARKETING BULLETIN

SPECIALTY FLUIDS - AGRICULTURE

Silwet STIK 2 spreader-sticker is a potentially cost-effective spray adjuvant. It is an excellent adjuvant candidate to consider for tank-mix applications under most weather conditions.

Silwet STIK 2 spreader-sticker was developed as a dual-action spray adjuvant. It helps provide both excellent spreading and sticking performance during pesticide applications on different crops. The use of organosilicone superspreaders can help increase coverage to enhance deposition and adhesion of spray droplets on foliar surfaces, resulting in lower spray volumes and higher pesticide efficacies.

In addition, the sticker component helps provide excellentrainfastening properties and, therefore, can be very effective in pesticide applications under most weather conditions.

# Key Features and Typical Benefits

- · 3-times more spreading over nonionic surfactants potentially lowering spray volumes and related application costs
- · Better spray droplet deposition and retention to enhance efficacy under humid or wet conditions
- Lower foaming than a competitive sticker for easier field applications
- · Compatible with most pesticide tank-mix formulations

# General Considerations for Use in Agrochemical Products

Silwet STIK 2 spreader-sticker may be considered for use as a spray adjuvant in agrochemical applications. As a tank-side spray adjuvant, best performance is generally achieved when spray mixtures are between pH 5.0 and 8.0, and used within 24 hours of preparation. Typical tank-mix use levels range from 0.1% to 0.4% (weight %) depending on the spray treatment conditions (e.g. pesticide, crop and spray volume).

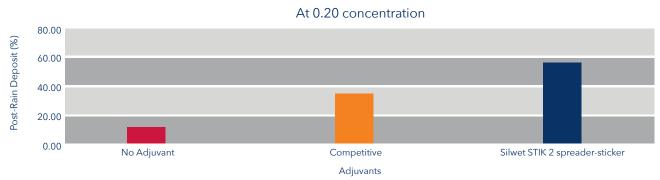
Mix well before use. Store between 2 and 30  $^{\circ}$ C. See package label and certificate of analysis for further information on instructions and requirements for use.

Typical Physical Properties	
Appearance	Milky white
Surface Tension (0.1%) mN/m	22
Viscosity at 25 °C, cSt	100
Aqueous pH	7.5
Spread Diameter at 0.2%, mm	34

### Performance Data

The sticking performance of fungicide on cabbage after rain is illustrated in Figure 1. While fungicide retention was less than 10% with no adjuvant, Silwet STIK 2 spreader-sticker could retain close to 60% of the treatment after rain. This was significantly higher than the retention rates provided by the leading competitive sticker.

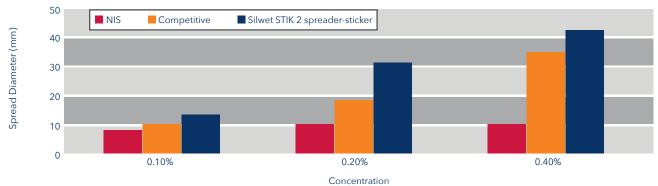
Figure 1: Fungicide Retention on Cabbage after Rain



Note: Test data. Actual results may vary.

The superior spreading of Silwet STIK 2 spreader-sticker versus nonionic surfactant (NIS) and competitive sticker is illustrated in Figure 2. Although the average droplet spreading diameter increased with adjuvant rates, Silwet STIK 2 spreader-sticker spread up to 70% more than the leading commercial spreader-sticker.

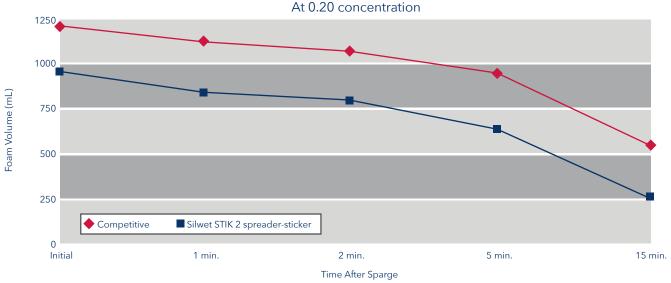
Figure 2: Spreading Performance Data



Note: Test data. Actual results may vary.

Finally, Figure 3 illustrates Silwet STIK 2 spreader-sticker foaming less than the leading commercial spreader-sticker. This advantage can make Silwet STIK 2 spreader-sticker easier to use in tank-mix applications.

Figure 3: Foam Profiles of Spreader-Stickers



Note: Test data. Actual results may vary.

# Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

### Limitations

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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Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative.

For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.



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