

Technical Information

BREAK-THRU® S 301

Product description

BREAK-THRU® S 301 is a biodegradable, polyether trisiloxane. In aqueous solutions, it gives super spreading and dramatically reduces surface tension. Therefore, the biological performance of crop protection products can be significantly enhanced by

- superior wetting of hydrophobic surfaces, in particular leaves and other parts of plants,
- better uptake through penetration of cuticular waxes, and stomatal flooding

Physical properties

Viscosity at 25 °C	50 – 100 mPas
Density at 20 °C	1.02 g/ml
Type	100 % non-ionic
Flash point	> 100 °C
Surface tension at 22 °C (0.1 % w/w in water)	approx. 22 mN/m
Appearance	liquid
Colour	colourless to pale straw

Application

BREAK-THRU® S 301 can be used in tank mix applications as well in formulations. Please inquire for details. For tank mixtures pesticide manufacturers may suggest a rate of a non-ionic surfactant to be used with their product. Follow the corresponding label recommendation.

However, if the pesticide label does not have a specific recommendation for adjuvant use, but does not prohibit its application, BREAK-THRU® S 301 should be applied at rates listed below. Careful observation of spray performance in a trial application with the tank mixture to be sprayed is advised to determine proper and efficient rates.

Microbial compatibility

BREAK-THRU® S 301 is biocompatible with microbial control agents like *Trichoderma spp.*, *Beauveria bassiana*, *Bacillus spp.*

BREAK-THRU® S 301 is a carrier liquid for microbial formulations, providing excellent shelf life results.

BREAK-THRU® S 301 absorbs and coordinates water and by that it controls the water activity. Water activity is one of the key parameters for microbial shelf life stability.

Dose Rate, Tank-Mix

Arable crops

Pesticides with systemic action: 150– 200 ml/ha to improve wetting, spreading and uptake

Pesticides with contact action: 100–125 ml/ha to improve wetting and spreading

Horticultural crops and orchards

150–250 ml/ha depending on the growth stage.

These dosages account for various water volumes. To be in line with regulatory compliances, please observe the local label for BREAK-THRU® S 301.

Listing status

BREAK-THRU® S 301 is listed in the following chemical inventories:

EINECS, TSCA, AICS, ECL, ENCS, IECSC (China), PICCS.

Per 40 CFR 180.910, BREAK-THRU® S 301 is exempt from the requirement of a tolerance when used in accordance with good agricultural practice as an inert ingredient in pesticide formulations applied to growing crops or to raw agricultural commodities after harvest.

BREAK-THRU® S 301 is OMRI (Organic Materials Review Institute) listed.

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Storage stability

BREAK-THRU® S 301 is stable in sealed containers for 4 years. BREAK-THRU® S 301 is not sensitive to freezing.

Packaging

4 x 200 kg drums (full pallet)
1 000 kg plastic containers

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

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