

## Product 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

## Typical Properties

Property	Unit	Value
<b>Appearance</b>		liquid
<b>Color</b>		colorless to pale straw
<b>Density</b>	g/cm <sup>3</sup>	1.02
at 20°C		
<b>Flash Point, min.</b>	°C	100
<b>Surface Tension</b>	mN/m	22
at 22°C (0.1% in w/w in water)		
<b>Viscosity</b>	mPa·s	50-100
at 25°C		

The data represents typical values (no product specification)

## TYPICAL APPLICATIONS

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.

## BENEFITS &amp; ADVANTAGES

## BREAK-THRU® S 301

- Is a biodegradable, super-spreader trisiloxane
- In aqueous solutions, it offers superior wetting and a dramatic reduction of surface tension
- Has no dangerous good classifications

## HANDLING &amp; PROCESSING

## 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.

## 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.

## PACKAGING

4 x 200 kg drums (full pallet)

1 000 kg plastic containers

## SHELF LIFE

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

## HAZARDOUS SUBSTANCE

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.

## REGISTRATION LISTING SUMMARY

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.

The relevant components of BREAK-THRU® S 301 are listed/registered or exempt in the following chemical inventories:

Registration Listings	
Registry	Status
<b>Australia (AICIS)</b>	Yes
<b>China (IECSC)</b>	Yes
<b>European Union (EINECS/ELINCS)</b>	Yes
<b>Japan (ENCS)</b>	Yes
<b>Korea (KECL)</b>	Yes
<b>Philippines (PICCS)</b>	Yes
<b>United States of America (TSCA)</b>	Yes

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