

Technical Information

BREAK-GARD® IR 100**Product description**

BREAK-GARD® IR 100 is a patented biodegradable surfactant without eco toxicological classification. It is used as adjuvant for irrigation water and fertigation solutions.

Physical properties

Viscosity at 20 °C	60 - 140 mPas
Density at 20 °C	1.02 - 1.03 g/ml
Type	100 % non-ionic
Flash point	> 100 °C
Pour point	5 °C
Appearance	liquid
Colour	colourless to pale straw

Benefits

BREAK-GARD® IR 100 increases the water and nutrient use efficiency and thereby improves the plant productivity per hectare.

BREAK-GARD® IR 100 prevents water repellency of soils, resulting in reduced water run-off, soil erosion and soil nutrient loss. Additionally it reduces evaporation of water by faster soil penetration. It leads to higher lateral water movement and a constant wetting of the root zone.

Dose Rate

BREAK-GARD® IR 100 is recommended at 1 L/ha up to 2 L/ha for applications in vegetables, grapes, fruits, ornamentals.

Repeat the application with a minimum interval of 10 days or longer, up to 6 times per growing season; irrigate between application cycles as usual.

Application

BREAK-GARD® IR 100 is applied through irrigation systems, like drip irrigation, micro-sprinkler, or overhead irrigation systems. It is either applied alone with water or together with nutrients in fertigation systems. If water is filtered add BREAK-GARD® IR 100 after filtering to avoid product loss. In cases of injection into the irrigation systems, concentrations lower than 0.02% (20 ml/100 L) should be avoided.

BREAK-GARD® IR 100 is used at the beginning of irrigation cycle in drip, micro-sprinkler, overhead irrigation (including center pivot systems). Onto bare soil BREAK-GARD® IR 100 is applied before planting, or on cultivated broad acreage crops and row crops. BREAK-GARD® IR 100 can also be applied with normal boom-spraying equipment at 1 L/ha in 1000 L/ha water; either immediately before rainfall or before sprinkler or pivot irrigation.

BREAK-GARD® IR 100 can be combined with nutrients, and is compatible with micro-nutrients in fertigation systems. It is compatible with beneficial micro-organisms which are applied with irrigation system.

Storage Stability

BREAK-GARD® IR 100 is stable in closed containers for at least 4 years.

BREAK-GARD® IR 100 is not sensitive to freezing.

Packaging

1 000 kg plastic containers

Listing Status

BREAK-GARD® IR 100 is listed in the following chemical inventories:

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

Per EPA 40 CFR 180.910, BREAK-GARD® IR 100 is exempt from the requirement of a tolerance when used in accordance with good agricultural practice as an inert ingredient applied to growing crops or to raw agricultural commodities after harvest.

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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