

SAFETY DATA SHEET

Safety Data Sheet according to Directive 2001/58/EC

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

SmartFresh(TM) 3.3% Technology

Product Use Description: Plant growth regulator.

Supplier Rohm and Haas Company
Herald Way
Coventry CV3 2RQ United Kingdom
Telephone:+44 (0) 24-7665-4400

Emergency telephone number

United Kingdom +44 (0)191-4898181

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a preparation.

Component	CAS-No.	EINECS-No.	Concentration	Classification
Cyclodextrin A.I.	10016-20-3	233-007-4	80,0 - <95,0%	Xi R36

3. HAZARDS IDENTIFICATION

This product is not hazardous according to EEC Directives 67/548/EEC and 99/45/EC.

4. FIRST AID MEASURES

Inhalation: Move to fresh air.

Skin contact: Wash with water and soap as a precaution. If skin irritation persists, call a physician.

Eye contact: Rinse with plenty of water. If eye irritation persists, consult a specialist.

Ingestion: Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use the following extinguishing media when fighting fires involving this material:
carbon dioxide (CO₂)
dry powder
foam
water spray

Specific hazards during fire fighting: Dusts at sufficient concentrations can form explosive mixtures with air.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective suit.

Further information: DO NOT use a solid stream of water. A solid stream of water directed at this material may create a potentially explosive airborne dust mixture.

Contain run-off.

Remain upwind.

Avoid breathing smoke.

Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment.

If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

Environmental precautions

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Methods for cleaning up

Keep spectators away.

Avoid breathing dust.

Transfer spilled material to suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Handling

Avoid high concentrations of dust in air and accumulation of dust on equipment. An airborne dust of this material can create a dust explosion. When handling and processing this material local exhaust ventilation may be required to control dust and reduce exposure to vapors. To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity. Protect all equipment from explosions by following applicable guidelines. For electrical equipment follow local codes and applicable electrical classification. Do not handle material near food, feed or drinking water.

Further information on storage conditions: Completely empty bag into application equipment. Dispose empty bag in a sanitary landfill or by incineration as allowed by state and local authorities. Avoid breathing smoke.

Storage

Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid all ignition sources. Do not store this material near food, feed or drinking water.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s)

Exposure limits are listed below, if they exist.

Exposure controls

Eye protection: Chemical resistant goggles must be worn. Eye protection worn must be compatible with respiratory protection system employed.

Hand protection: Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): - Polyvinyl chloride-coated glove or other chemical-resistant rubber-coated glove. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

Respiratory protection: No personal respiratory protective equipment normally required. Use certified respiratory protection equipment meeting EU requirements (89/656/EEC, 89/686/EEC), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Engineering measures: Use only in area provided with appropriate exhaust ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	powder
Colour	white
pH	not applicable
Boiling point/range	not applicable
Melting point/range	>200 °C

Flash point	not applicable
Ignition temperature	ca.400 °C
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	negligible
Relative vapour density	not applicable
Water solubility	0,5 g/l
Relative density	No data available
Viscosity, dynamic	not applicable
Evaporation rate	not applicable
Percent volatility	0 - 6 % water
VOC's	3,1 - 3,5 g/cm ³

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Hazardous reactions	None known. Stable
Materials to avoid	There are no known materials which are incompatible with this product.
Hazardous decomposition products	There are no known hazardous decomposition products for this material.,
polymerization	Product will not undergo polymerization.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	LD50rat > 5.000 mg/kg
Acute inhalation toxicity	LC50rat 4 h> 2,5 mg/l (No deaths or clinical signs of toxicity were observed at this concentration)
Acute dermal toxicity	LD50rat > 5.000 mg/kg
Skin irritation	Rabbit slight irritation (US Classification) Rabbit No skin irritation (EEC Classification)
Eye irritation	Rabbit Moderate eye irritation (US Classification) Rabbit No eye irritation (EEC Classification)
Sensitization	Maximisation Test (GPMT)guinea pigNot a sensitizer.
Teratogenicity	Developmental toxicity (rat): no evidence of any developmental effects.
Mutagenicity	Ames mutagenicity: Non-mutagenic In vivo micronucleus assay (mouse bone marrow cells): Not mutagenic

12. ECOLOGICAL INFORMATION

There is no data available for this product.

13. DISPOSAL CONSIDERATIONS

Environmental precautions:CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Disposal

For disposal, incinerate this material at a facility that complies with local, state, and federal regulations.

European Waste Catalogue (94/3 EC) The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. If the material as delivered must be disposed of, or you require assistance with assigning the proper EWC code, please contact your local Rohm and Haas office

14. TRANSPORT INFORMATION

Classification for ROAD and Rail transport (ADR/RID):

Not regulated (Not dangerous for transport)

Classification for SEA transport (IMO-IMDG):

Not regulated (Not dangerous for transport)

Classification for AIR transport (IATA/ICAO):

Not regulated (Not dangerous for transport)

15. REGULATORY INFORMATION

Label

Classification and labeling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.

Hazard symbol and Indication of danger

This product is not hazardous according to EEC Directives 67/548/EEC and 99/45/EC.

EU. EINECS (EINECS) This substance is not in EINECS, and so does not comply.

US. Toxic Substances Control Act (TSCA) This product is subject to regulation under the US Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and is therefore exempt from U.S. Toxic Substances Control Act (TSCA) Inventory listing requirements.

16. OTHER INFORMATION

Further information

The Material Safety Data Sheet (MSDS) augments the label and should not be used in place of regulatory approved product labels which are attached to or accompanying the product container. This MSDS provides important health, safety and environmental information for personnel that are manufacturing, distributing, transporting and storing the product, including emergency responders and other product handlers. The label provides information specifically for product users.

Full text of the R-phrases given in Section 2

R36 Irritating to eyes.

Emergency telephone number

European Region	+33 (0) 140025045
United States of America	+1-215-592-3000

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
Bar denotes a revision from prior MSDS.	

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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