



Material Safety Data Sheet
SENSAT™

MSDS Number: 102000012503
MSDS Version 1.2
Revision Date: 02/22/2012
Print Date: 02/24/2012

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name SENSAT™
MSDS Number 102000012503
Product code (UVP) 06105067
EPA Registration No. 264-995
Product Use Seed treatment, Insecticide

Bayer CropScience
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)
For Product Information call: 1-866-99BAYER (1-866-992-2937)

SECTION 2. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview Caution! Moderate eye irritation. May cause skin irritation. May cause irritation of respiratory tract. Avoid inhalation of vapour or mist. Avoid contact with skin, eyes and clothing.

Physical State liquid

Odor characteristic

Appearance brown

Exposure routes Ingestion, Inhalation, Eye contact, Skin contact

Immediate Effects

Eye Moderate eye irritation. Avoid contact with eyes.

skin May cause skin irritation. Avoid contact with skin and clothing.

Ingestion May be harmful if swallowed. Do not take internally.

Inhalation May cause respiratory tract irritation. Avoid inhalation of vapour or mist.

Chronic or Delayed Long-Term This product or its components may have target organ effects.



Material Safety Data Sheet

SENSAT™

MSDS Number: 102000012503
MSDS Version 1.2

Potential Environmental Effect Toxic to fish. Highly toxic to aquatic invertebrates.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Average % by Weight
Spinosad, mixture of Factor A and Factor D	168316-95-8	8.66
Spinosad Factor A	131929-60-7	
Spinosad Factor D	131929-63-0	
1,2-Propanediol	57-55-6	10.75

SECTION 4. FIRST AID MEASURES

General	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
skin	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Notes to physician Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

Flash point	> 100 °C / 212 °F
Autoignition temperature	no data available
Lower Flammability Limit	no data available



Material Safety Data Sheet

SENSAT™

MSDS Number: 102000012503
MSDS Version 1.2

Upper Flammability Limit	no data available
Explosiveness	no data available
Fire and Explosion Hazards	In the event of fire the following may be released: Carbon monoxide (CO) Carbon dioxide (CO ₂)
Suitable extinguishing media	Foam, Carbon dioxide (CO ₂), Dry chemical, Water spray
Fire Fighting Instructions	Fight fire from upwind position. Keep out of smoke. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.
Additional advice	Use personal protective equipment.

SECTION 7. HANDLING AND STORAGE

Handling procedures	Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.
Storing Procedures	Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.
Work/Hygienic Procedures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.



Material Safety Data Sheet
SENSAT™

MSDS Number: 102000012503
 MSDS Version 1.2

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection	Follow all label instructions. Train employees in safe use of the product. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.
Eye/Face Protection	Safety glasses with side-shields or Goggles
Hand protection	Chemical-resistant gloves made of waterproof material such as neoprene, butyl rubber, barrier laminate or nitrile rubber.
Body Protection	Wear long-sleeved shirt and long pants and shoes plus socks.
Respiratory protection	In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
Exposure Limits	

1,2-Propanediol	57-55-6	WEEL	TWA	10 mg/m3
		TX ESL	ST ESL	20 ug/m3
		TX ESL	ST ESL	500 ppm
		TX ESL	AN ESL	2 ug/m3
		TX ESL	AN ESL	50 ppm

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	brown
Physical State	liquid
Odor	characteristic
pH	5.5 - 7.5 (100 %)
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.02 g/cm ³ at 20 °C
Evaporation rate	no data available
Boiling Point	no data available



Material Safety Data Sheet

SENSAT™

MSDS Number: 102000012503
MSDS Version 1.2

Melting / Freezing Point	no data available
Water solubility	dispersible
Minimum Ignition Energy	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	150 - 400 mPa.s

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	freezing
Incompatibility	no data available
Chemical Stability	Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity studies have been bridged from a similar formulation containing a higher percentage of the active ingredient, spinosad. The non-acute information pertains to technical-grade spinosad.

Acute oral toxicity	female rat: LD50: > 5,000 mg/kg (Up and Down Method)
Acute dermal toxicity	male/female combined rat: LD50: > 5,000 mg/kg
Acute inhalation toxicity	male/female combined rat: LC50: > 2.5 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. (actual)
	male/female combined rat: LC50: > 10 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. (actual)
Skin irritation	rabbit: Slight irritation
Eye irritation	rabbit: Mild eye irritation.
Sensitisation	guinea pig: Non-sensitizing.
Chronic toxicity	Spinosad caused effects in the liver, kidney, spleen and/or thyroids in chronic dietary studies in rats and dogs.



Material Safety Data Sheet
SENSAT™

MSDS Number: 102000012503
MSDS Version 1.2

Assessment Carcinogenicity

Spinosad was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive toxicity

REPRODUCTION: Spinosad is not considered a reproductive toxicant at non-maternally toxic dose levels.

DEVELOPMENTAL TOXICITY: Spinosad was not a developmental toxicant in rats and rabbits.

Assessment neurotoxicity

Spinosad did not cause neurotoxicity in rats in acute, subchronic or chronic toxicity studies.

Mutagenicity

Spinosad was not mutagenic or genotoxic in a battery of in vitro and in vivo mutagenicity studies.

SECTION 12. ECOLOGICAL INFORMATION

Environmental precautions

Apply this product as specified on the label. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not allow to get into surface water, drains and ground water.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Dispose in accordance with all local, state/provincial and federal regulations. Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

Container Disposal

Do not re-use empty containers. Triple rinse containers. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke.

RCRA Information

Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.



Material Safety Data Sheet
SENSAT™

MSDS Number: 102000012503
MSDS Version 1.2

SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 264-995

US Federal Regulations

TSCA list

1,2-Propanediol 57-55-6

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

1,2-Propanediol 57-55-6 MN, RI

Canadian Regulations

Canadian Domestic Substance List

1,2-Propanediol 57-55-6

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.



Material Safety Data Sheet
SENSAT™

MSDS Number: 102000012503
MSDS Version 1.2

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 2 Instability - 0 Others - none

HMS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Reviewed and updated for general editorial purposes. The following sections have been revised: Section 9: Physical and Chemical Properties. Section 16: Other Information.

Revision Date: 02/22/2012

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