

**Material Safety Data Sheet****SYNAPSE™ WG INSECTICIDE**

MSDS Number: 102000011376

MSDS Version 1.2

Revision Date: 06/23/2008

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name SYNAPSE™ WG INSECTICIDE
MSDS Number 102000011376
EPA Registration No. 264-1026

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. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Flubendiamide	272451-65-7	24.00
Dibutyl naphthalenesulfonic acid, sodium salt	25417-20-3	2.00

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! Harmful if swallowed or absorbed through skin. Moderate eye irritation. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

Physical State water-dispersible granules

Odor weak characteristic

Appearance brown

Routes of Exposure Ingestion, Skin Absorption, Eye contact

Immediate Effects

Eye Moderate eye irritation. Avoid contact with eyes.

Skin Harmful if absorbed through skin. Avoid contact with skin and clothing.

Ingestion Harmful if swallowed. Do not take internally.

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

**Material Safety Data Sheet****SYNAPSE™ WG INSECTICIDE**

MSDS Number: 102000011376

MSDS Version 1.2

Potential Environmental Effect Toxic to aquatic invertebrates.

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	There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards	In the event of fire the following can be released: Hydrogen cyanide (hydrocyanic acid) Hydrogen fluoride (HF) Carbon monoxide (CO) Nitrogen oxides (NOx) Sulphur oxides
Suitable Extinguishing Media	Water spray, Carbon dioxide (CO2), Foam, Sand
Fire Fighting Instructions	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses. In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

**Material Safety Data Sheet****SYNAPSE™ WG INSECTICIDE**

MSDS Number: 102000011376

MSDS Version 1.2

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Remove all sources of ignition. Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
Methods for Cleaning Up	Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.
Additional Advice	Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

SECTION 7. HANDLING AND STORAGE

Handling Procedures	Use only in area provided with appropriate exhaust ventilation. Keep away from heat and sources of ignition. Dust may form explosive mixtures with air.
Storing Procedures	Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from food, drink and animal feedingstuffs.
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. Remove Personal Protective Equipment (PPE) immediately after handling this product. 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.
Min/Max Storage Temperatures	Recommended maximum transport/storage temperature: 38 °C / 100 °F The 30-day storage temperature average must not exceed the recommended maximum.

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.
---------------------------	--



Material Safety Data Sheet

SYNAPSE™ WG INSECTICIDE

MSDS Number: 102000011376

MSDS Version 1.2

Eye/Face Protection	Safety glasses with side-shields
Hand Protection	Chemical resistant nitrile rubber gloves
Body Protection	Wear long-sleeved shirt and long pants and shoes plus socks.
Respiratory Protection	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Exposure Limits

Flubendiamide	272451-65-7	OES BCS*		0.5 mg/m3
Kaolin	1332-58-7	ACGIH	TWA	2 mg/m3
		NIOSH	REL	5 mg/m3
		NIOSH	REL	10 mg/m3
		US CA OEL	TWA PEL	2 mg/m3
		TX ESL	ST ESL	20 ug/m3
		TX ESL	AN ESL	2 ug/m3

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	brown
Physical State	water-dispersible granules
Odor	weak characteristic
pH	8 - 10 (1 %) at 23 °C
Water solubility	dispersible

SECTION 10. STABILITY AND REACTIVITY

Hazardous Reactions	No hazardous reactions when stored and handled according to prescribed instructions.
----------------------------	--

SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the technical-grade active ingredient, flubendiamide.

Acute Oral Toxicity	female rat: LD50: > 2,000 mg/kg
----------------------------	---------------------------------

**Material Safety Data Sheet****SYNAPSE™ WG INSECTICIDE**

MSDS Number: 102000011376

MSDS Version 1.2

Acute Dermal Toxicity	rat: LD50: > 2,000 mg/kg
Skin Irritation	rabbit: No skin irritation.
Eye Irritation	rabbit: Minimally irritating.
Sensitization	guinea pig: Non-sensitizing.
Chronic Toxicity	Flubendiamide caused liver and/or thyroid effects in chronic studies in rats and dogs.

Assessment Carcinogenicity

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

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive & Developmental Toxicity	REPRODUCTION: Flubendiamide was not a primary reproductive toxicant in a two-generation reproduction study in rats. Reproductive effects were observed only at doses that caused systemic toxicity in parental animals.
--	--

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

Neurotoxicity	Flubendiamide was not a neurotoxicant in acute and developmental neurotoxicity screening studies in rats.
----------------------	---

Mutagenicity	Flubendiamide was not genotoxic in a battery of in vitro and in vivo tests.
---------------------	---

SECTION 12. ECOLOGICAL INFORMATION

Acute Toxicity to Aquatic Invertebrates	Water flea (Daphnia magna) EC50: > 0.0063 mg/l Exposure time: 48 h
--	--

Environmental Precautions	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label. Do not apply when weather conditions favor runoff or drift.
----------------------------------	--

**Material Safety Data Sheet**
SYNAPSE™ WG INSECTICIDEMSDS Number: 102000011376
MSDS Version 1.2**SECTION 13. DISPOSAL CONSIDERATIONS**

General Disposal Guidance	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	Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:
Not regulated for any mode of transportation in the US

IMDG CLASSIFICATION:
UN3077, Environmentally Hazardous Substances, Solid, N.O.S.(Flubendiamid), 9, PG III, Marine Pollutant

FREIGHT CLASSIFICATION:
Insecticides or Fungicides, N.O.I.; other than poison

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 264-1026

US Federal Regulations**TSCA list**

Dibutyl naphthalenesulfonic acid, sodium salt 25417-20-3

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

None.

Canadian Regulations**Canadian Domestic Substance List**

Dibutyl naphthalenesulfonic acid, sodium salt 25417-20-3



Material Safety Data Sheet

SYNAPSE™ WG INSECTICIDE

MSDS Number: 102000011376

MSDS Version 1.2

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Reactivity - 0 Others - none

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

Reason to Revise: Section 8: Exposure Limits

Revision Date: 06/23/2008

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.