

SDS Number: 102000018463 SDS Version 1.0 Revision Date: 06/07/2012 Print Date: 06/08/2012

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product nameCRITERION™ 0.5 G INSECTICIDESDS Number102000018463Product code (UVP)79231857EPA Registration No.432-1328Product UseInsecticide

Bayer Environmental Science 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: 1-800-331-2867

SECTION 2. HAZARDS IDENTIFICATION

| NOTE: Please refer to Section Emergency Overview | n 11 for detailed toxicological information. Caution! Harmful if swallowed or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling. |
|---|---|
| Physical State | granular |
| Odor | characteristic |
| Appearance | light tan to brown |
| Exposure routes | Eye contact, Skin Absorption, Inhalation, Ingestion |
| Immediate Effects Eye | Causes 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. |
| Inhalation | Avoid breathing dust. |

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| Chronic or Delayed Long-Term | This product is not listed as a carcinogen by ACGIH, NTP, IARC or OSHA. However, it may contain crystalline silica (quartz), a substance which has been listed as a carcinogen by ACGIH, NTP and IARC. Crystalline silica is a naturally- occurring mineral component of many sands and clays. Although the carcinogenic potential of crystalline silica in humans is controversial, it must be considered if it is inhaled under excessive exposure conditions. The respirable portion of the silica that may be contained in this product, however, is small, such that inhalation exposure during anticipated conditions of use is minimal. This product or its components may have target organ effects. |
|--|--|
| Medical Conditions Aggravated by Exposure | No specific medical conditions are known which may be aggravated by exposure to this product. As with all materials which can cause upper respiratory tract irritation, persons with a history of asthma, emphysema, or hyperreactive airways disease may be more susceptible to overexposure. Pulmonary and respiratory diseases may be aggravated by exposure to respirable crystalline silica. |
| Potential Environmental Effect | Highly toxic to aquatic invertebrates. |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Average % by Weight |
|--------------------------|-------------|---------------------|
| Imidacloprid | 138261-41-3 | 0.50 |

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. |
|------------|---|
| Еуе | 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. |

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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 | not applicable |
|-------------------------------|---|
| Autoignition temperature | no data available |
| Lower Flammability Limit | no data available |
| Upper Flammability Limit | no data available |
| Explosiveness | no data available |
| Suitable extinguishing media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Fire Fighting Instructions | Evacuate personnel to safe areas. Keep out of smoke. Fight fire from upwind position. Avoid contact with spilled product or contaminated surfaces. 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. |
| Dust explosion class | no data available |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions | Isolate hazard area. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. |
|-------------------------|---|
| Methods for cleaning up | Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. When picked up, treat product as prescribed in Ch. 13. "Disposal considerations". Clean contaminated floors and objects thoroughly, observing environmental regulations. |
| Additional advice | Do not allow to enter soil, waterways or waste water canal. |

SECTION 7. HANDLING AND STORAGE

Handling procedures Handle and open container in a manner as to prevent spillage. Avoid dust

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formation. Avoid contact with skin, eyes and clothing. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Storing ProceduresStore in a cool, dry place and in such a manner as to prevent cross
contamination with other crop protection products, fertilizers, food, and feed.
Store in original container and out of the reach of children, preferably in a locked
storage area.

Work/HygienicHandle in accordance with good industrial hygiene and safety practice. Wash
hands thoroughly with soap and water after handling and before eating, drinking,
chewing gum, using tobacco, using the toilet or applying cosmetics. Smoking,
eating and drinking should be prohibited in the application area.

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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| General Protection | Follow all label instructions. Train employees in safe use of the product. | | | |
|------------------------|--|------------------------------|-------------------------|---|
| | instructions fo | | • | g PPE. If no such water. Keep and wash |
| Eye/Face Protection | Tightly fitting safety goggles | | | |
| Hand protection | Chemical resist | stant nitrile rubber glo | ves | |
| Body Protection | Wear long-sle | eved shirt and long pa | ants and shoes plus sc | ocks. |
| 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 | | | | |
| Imidacloprid | 138261-41-3 | OES BCS* TX ESL TX ESL | TWA ST ESL AN ESL | 0.7 mg/m3 50 ug/m3 5 ug/m3 |

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



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | light tan to brown |
|--|--------------------|
| Appearance | |
| Physical State | granular |
| Odor | characteristic |
| рН | no data available |
| Vapor Pressure | no data available |
| Vapor Density (Air = 1) | no data available |
| Specific Gravity | no data available |
| Evaporation rate | no data available |
| Boiling Point | no data available |
| Melting / Freezing Point | no data available |
| Water solubility | no data available |
| Solubility in other solvents | no data available |
| Minimum Ignition Energy | no data available |
| Decomposition temperature | no data available |
| Partition coefficient: n- octanol/water | no data available |
| Viscosity | no data available |

SECTION 10. STABILITY AND REACTIVITY

| Conditions to avoid | no data available |
|-------------------------------------|--|
| Incompatibility | no data available |
| Hazardous Decomposition Products | no data available |
| Hazardous reactions | No hazardous reactions when stored and handled according to prescribed instructions. |



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Chemical Stability Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Only an acute eye irritation study has been performed on this product as formulated. All other acute toxicity data have been bridged from a similar granular formulation containing a higher percentage of the active ingredient, imidacloprid. The non-acute information pertains to the technical-grade active ingredient.

| Acute oral toxicity | male/female combined rat: LD50: > 4,820 mg/kg |
|---------------------------|---|
| Acute dermal toxicity | male/female combined rabbit: LD50: > 2,000 mg/kg |
| Acute inhalation toxicity | male/female combined rat: LC50: > 5.09 mg/l Exposure time: 4 h Determined in the form of dust. (actual) male/female combined rat: LC50: > 20 mg/l Exposure time: 1 h |
| | Determined in the form of dust. Extrapolated from the 4 hr LC50. (actual) |
| Skin irritation | rabbit: No skin irritation |
| Eye irritation | rabbit: Mild eye irritation. |
| Sensitisation | guinea pig: Non-sensitizing. |
| Chronic toxicity | Imidacloprid did not cause specific target organ toxicity in experimental animal studies. |

Assessment Carcinogenicity

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

ACGIH None. NTP None. IARC None. OSHA None.

Reproductive toxicity

Imidacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Imidacloprid is related to general toxicity.



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Developmental Toxicity Imidacloprid caused developmental toxicity only at doses toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity.

Mutagenicity Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION

Environmental 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. Do not allow to get into surface water, drains and ground water.

SECTION 13. DISPOSAL CONSIDERATIONS

| General Disposal Guidance | Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations. Follow advice on product label and/or leaflet. |
|------------------------------|--|
| Container Disposal | Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke. Follow advice on product label and/or leaflet. |
| 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. |

SECTION 14. TRANSPORT INFORMATION

| 49CFR | Not dangerous goods / not hazardous material |
|---|--|
| IMDG UN-Number Class Packaging group Marine pollutant Description of the goods | 3077 9 III YES ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE) |
| IATA UN-Number Class Packaging group Environm. Hazardous Mark | 3077 9 III YES |



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Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IMIDACLOPRID MIXTURE)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 432-1328 **US Federal Regulations TSCA** list None. 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** None. **Environmental** CERCLA None. **Clean Water Section 307 Priority Pollutants** None. Safe Drinking Water Act Maximum Contaminant Levels None.



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SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):
Health - 1Health - 1Flammability - 1Instability - 1Others - noneHMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)
Health - 1Flammability - 1Physical Hazard - 1PPE -0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: New Safety Data Sheet.

Revision Date: 06/07/2012

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