SAFETY DATA SHEET



CRITERION™ 0.5 G INSECTICIDE

Version 2 / USA Revision Date: 10/16/2013 102000007119 Print Date: 01/05/2017

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name CRITERION™ 0.5 G INSECTICIDE

Product code (UVP) 04399447 SDS Number 10200007119 EPA Registration No. 432-1328

Relevant identified uses of the substance or mixture and uses advised against

Use Insecticide

Restrictions on use See product label for restrictions.

Information on manufacturer

Bayer Environmental Science 2 T.W. Alexander Drive

Research Triangle PK, NC 27709

United States

Emergency telephone no.

All Emergencies, 24hr/ 7 days 1-800-334-7577

Product Information Telephone No.

SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Eye irritation : Category 2B Signal word: Warning Hazard statements

Causes eye irritation.

Precautionary statements

Wash thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Other hazards

No other hazards known.



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name CAS-No. Average % by Weight

Imidacloprid 138261-41-3 0.50 Crystalline quartz (respirable) 14808-60-7 3.82

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice When possible, have the product container or label with you when

calling a poison control center or doctor or going for treatment.

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.

Skin contact 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.

Eye contact 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.

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.

Most important symptoms and effects, both acute and delayed

Symptoms To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by

the patient's condition is recommended. There is no specific

antidote.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water, Carbon dioxide (CO2), Dry chemical, Foam

Unsuitable None known.



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Special hazards arising from the substance or

mixture

Hazardous decomposition products due to incomplete combustion.

Advice for firefighters

Special protective

equipment for fire-fighters

Firefighters should wear NIOSH approved self-contained breathing

apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed

containers exposed to fire with water spray. Do not allow run-off

from fire fighting to enter drains or water courses.

Flash point not applicable

Autoignition temperature no data available

Lower explosion limit not applicable

Upper explosion limit not applicable

Explosivity no data available

Dust explosion class no data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact

with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

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.

Reference to other sections Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling



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Advice on safe handling 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.

Hygiene measures Wash hands thoroughly with soap and water after handling and

before eating, drinking, chewing gum, using tobacco, using the toilet

or applying cosmetics.

Remove soiled clothing immediately and clean thoroughly before

using again. Wash thoroughly and put on clean clothing.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap

and water. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Imidacloprid	138261-41-3	0.7 mg/m3 (TWA)		OES BCS*
Imidacloprid	138261-41-3	5 ug/m3 (AN ESL)	07 2011	TX ESL
Imidacloprid	138261-41-3	50 ug/m3 (ST ESL)	07 2011	TX ESL
Crystalline quartz (respirable) (Respirable fraction.)	14808-60-7	0.025 mg/m3 (TWA)	02 2012	ACGIH
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.05 mg/m3 (REL)	2010	NIOSH
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA)	1989	OSHA Z1A
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA)	06 2008	TN OEL
Crystalline quartz (respirable) (Particulate.)	14808-60-7	0.27 ug/m3 (AN ESL)	02 2013	TX ESL
Crystalline quartz (respirable) (Particulate.)	14808-60-7	14 ug/m3 (ST ESL)	02 2013	TX ESL
Crystalline quartz (respirable) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA PEL)	08 2010	US CA OEL
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA PEL)	08 2010	US CA OEL
Crystalline quartz (respirable) (Respirable.)	14808-60-7	2.4 millions of particles per cubic foot of air (TWA)	2000	Z3



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Crystalline quartz (respirable) (Respirable.)	14808-60-7	0.1 mg/m3 (TWA)	2000	Z3
Crystalline quartz (respirable) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA)	2000	Z3

^{*}OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

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.

Hand protection Chemical resistant nitrile rubber gloves

Eye protection Tightly fitting safety goggles

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective

measures

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance grey

Physical State granular

Odor none

Odour Threshold no data available

Vapor Pressure no data available

Vapor Density (Air = 1) no data available

Bulk density 58 - 64 lb/ft³

Evapouration rate not applicable

Boiling Point not applicable

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Melting / Freezing Point not applicable

Water solubility insoluble

Minimum Ignition Energy no data available

Decomposition temperature

no data available

Partition coefficient: n-

octanol/water

no data available

Viscosity not applicable

Flash point not applicable

Autoignition temperature no data available

Lower explosion limit not applicable

Upper explosion limit not applicable

Explosivity no data available

Dust explosion class no data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition no data available

Chemical stability Stable under normal conditions.

Possibility of hazardous

reactions

No hazardous reactions known.

Conditions to avoid Heat, flames and sparks.

Incompatible materials no data available

Hazardous decomposition

products

Hydrogen chloride (HCI)

Hydrogen cyanide (hydrocyanic acid)

Carbon dioxide (CO2) Nitrogen oxides (NOx)





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SECTION 11: TOXICOLOGICAL INFORMATION

Eye contact, Skin Absorption, Skin contact, Ingestion **Exposure routes**

Immediate Effects

Eve Causes eye irritation.

Skin Harmful if absorbed through skin.

Ingestion Harmful if swallowed.

Information on toxicological effects

LD50 (male/female combined rat) > 4,820 mg/kg Acute oral toxicity

LC50 (male/female combined rat) > 5.09 mg/l Acute inhalation toxicity

Exposure time: 4 h

Determined in the form of dust.

(actual)

LC50 (male/female combined rat) > 20 mg/l

Exposure time: 1 h

Determined in the form of dust. Extrapolated from the 4 hr LC50.

(actual)

Acute dermal toxicity LD50 (male/female combined rabbit) > 2,000 mg/kg

Skin irritation No skin irritation (rabbit)

Eye irritation Mild eye irritation. (rabbit)

Sensitisation Non-sensitizing. (guinea pig)

Assessment repeated dose toxicity

Imidacloprid did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity

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

Assessment Carcinogenicity

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

ACGIH

Crystalline quartz (respirable) 14808-60-7 Group A2

NTP

Crystalline quartz (respirable) 14808-60-7

IARC

Crystalline quartz (respirable) 14808-60-7 Overall evaluation: 1



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OSHA

None.

Assessment toxicity to reproduction

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 parental toxicity.

Assessment developmental toxicity

Imidacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Rainbow trout (Oncorhynchus mykiss)) 211 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient imidacloprid.

Toxicity to aquatic

invertebrates

EC50 (Water flea (Daphnia magna)) 85 mg/l

Exposure time: 48 h

The value mentioned relates to the active ingredient imidacloprid.

LC50 (Chironomus riparius (non-biting midge)) 0.0552 mg/l

Exposure time: 24 h

The value mentioned relates to the active ingredient imidacloprid.

Toxicity to aquatic plants (Desmodesmus subspicatus) > 10 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient imidacloprid.

Toxicity to bacteria EC50 (Activated sludge) > 10,000 mg/l

The value mentioned relates to the active ingredient imidacloprid.

Biodegradability Imidacloprid: not rapidly biodegradable

Koc Imidacloprid: Koc:225

Bioaccumulation Imidacloprid:

Does not bioaccumulate.

Mobility in soil Imidacloprid: Moderately mobile in soils

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.

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

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product 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.

Contaminated packaging Rinsed packaging may be acceptable for landfill, otherwise

incineration will be required in accordance with local regulations.

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.

SECTION 14: TRANSPORT INFORMATION

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

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN

POISON

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1328

US Federal Regulations

TSCA list

Crystalline quartz (respirable) 14808-60-7

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 contains a chemical known to the State of California to cause cancer.

Crystalline quartz (respirable) 14808-60-7

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

US State Right-To-Know Ingredients

Crystalline quartz (respirable) 14808-60-7 MN



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Canadian Regulations

Canadian Domestic Substance List

Crystalline quartz (respirable) 14808-60-7

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Crystalline quartz (respirable) 14808-60-7

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: 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.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Instability - 1 Others - none

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

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

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

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

Revision Date: 10/16/2013

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