

Material Safety Data Sheet MERIT® 75 WP INSECTICIDE

MSDS Number: 102000007120 MSDS Version 1.6 Revision Date: 02/09/2011 Print Date: 02/25/2011

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name MERIT® 75 WP INSECTICIDE

MSDS Number 102000007120 **EPA Registration No.** 432-1314

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 11 for detailed toxicological information.

Emergency Overview Caution! Harmful if swallowed, inhaled or absorbed through the skin. Causes

eye irritation. Avoid contact with skin, eyes and clothing. Avoid breathing dust or

vapor.

Physical State solid powder

Odor none

Appearance off-white

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

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 Harmful if inhaled. Avoid breathing dust or vapor.

Chronic or Delayed

Long-Term

This product or its components may have target organ effects.

Potential Environmental

Effect

Highly toxic to aquatic invertebrates. Highly toxic to bees.



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name CAS-No. Average % by Weight

138261-41-3 75.00 Imidacloprid

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 not applicable

Suitable extinguishing

media

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

Fire Fighting

Keep out of smoke. Fight fire from upwind position. Cool closed containers Instructions

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.



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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 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.

SECTION 7. HANDLING AND STORAGE

Handling procedures Handle and open container in a manner as to prevent spillage. Use only in area

provided with appropriate exhaust ventilation.

Storing Procedures Protect from freezing.

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.

The 30-day storage temperature average must not exceed the recommended

maximum.

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.

Wash thoroughly and put on clean clothing. Remove soiled clothing immediately

and clean thoroughly before using again.

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.

Min/Max Storage Temperatures

Recommended maximum transport/storage temperature: 38 °C / 100 °F

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection



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instructions for washables, use detergent and warm/tepid water. Keep and wash

PPE separately from other laundry.

Eye/Face Protection Tightly fitting safety goggles

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

This product contains material which are Trade Secret and may have

Occupational Exposure Limits. If more information is required, call the product

information number listed in Section 1.

Imidacloprid 138261-41-3 OES BCS* TWA 0.7 mg/m3

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance off-white

Physical State solid powder

Odor none

pH 7 (1 %) suspension in water

Bulk density 30 lb/ft³ (bulk density tapped)

Water solubility dispersible

SECTION 10. STABILITY AND REACTIVITY

Hazardous Thermal decomposition

Decomposition Products Hydrogen cyanide (hydrocyanic acid)

Carbon monoxide nitrogen oxides (NOx) Hydrogen chloride (HCI)

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



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SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been conducted on this product as formulated. The non-acute information pertains to the active ingredient, imidacloprid.

Acute oral toxicity male rat: LD50: 2,591 mg/kg

female rat: LD50: 1,858 mg/kg

Acute dermal toxicity male/female combined rat: LD50: > 2,000 mg/kg

Acute inhalation toxicity male rat: LC50: 2.65 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

(actual)

female rat: LC50: 2.75 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

(actual)

male rat: LC50: 10.6 mg/l

Exposure time: 1 h

Determined in the form of liquid aerosol.

Extrapolated from the 4 hr LC50.

(actual)

female rat: LC50: 11.0 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 Imidacloprid did not cause any significant specific adverse effects or target

organ toxicity in subchronic toxicity studies.

Assessment Carcinogenicity

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

ACGIH

None.

NTP

None.



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None.

None.

Reproductive toxicity Imidacloprid was not a reproductive toxicant in a two-generation study in rats.

Developmental Toxicity Imidacloprid was not a developmental toxicant in rats and rabbits.

Assessment Imidacloprid showed slight behavioral and activity changes only at the highest dose tested in neurotoxicity studies in rats. There were no correlating

morphological changes observed in the neural tissues.

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 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.

Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal 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 DisposalCompletely 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.

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

CFR Not dangerous goods / not hazardous material

IMDG

UN-Number 3077



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Class 9 Packaging group III

Marine pollutant Marine Pollutant

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(IMIDACLOPRID MIXTURE)

IATA

UN-Number 3077 Class 9 Packaging group III

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 siro c45:t.03 (ackag)5.OPRID MIXTURE)



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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 - 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: Updated for general editorial purposes. The following sections have been revised: Section 16: Other Information.

Revision Date: 02/09/2011

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