



DELTA DUST® INSECTICIDE

Version 4.0 / USA
102000004846

1/11
Revision Date: 10/06/2015
Print Date: 10/07/2015

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

Product identifier

Trade name DELTADUST® INSECTICIDE

Product code (UVP) 05952247

SDS Number 102000004846

EPA Registration No. 432-772

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

Use Insecticide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Concentration % by weight |
|---------------------------------|------------|---------------------------|
| Deltamethrin | 52918-63-5 | 0.05 |
| Crystalline quartz (respirable) | 14808-60-7 | 2.50 |
| Calcium carbonate | 1317-65-3 | 95.4 |



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

Unsuitable None known.

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. Contain the spread of the fire-fighting media.

Flash point not applicable

Autoignition temperature no data available



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| | |
|------------------------------|-------------------|
| 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

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 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.

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.

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Print Date: 10/07/2015**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

| Components | CAS-No. | Control parameters | Update | Basis |
|--|------------|--|---------|-----------|
| Deltamethrin | 52918-63-5 | 0.02 mg/m ³ (TWA) | | OES BCS* |
| Crystalline quartz (respirable) (Respirable fraction.) | 14808-60-7 | 0.025 mg/m ³ (TWA) | 02 2012 | ACGIH |
| Crystalline quartz (respirable) (Respirable dust.) | 14808-60-7 | 0.05 mg/m ³ (REL) | 2010 | NIOSH |
| Crystalline quartz (respirable) (Respirable dust.) | 14808-60-7 | 0.1 mg/m ³ (TWA) | 1989 | OSHA Z1A |
| Crystalline quartz (respirable) (Respirable dust.) | 14808-60-7 | 0.1 mg/m ³ (TWA) | 06 2008 | TN OEL |
| Crystalline quartz (respirable) | 14808-60-7 | 0.27ug/m ³ (AN ESL) | 03 2014 | TX ESL |
| Crystalline quartz (respirable) | 14808-60-7 | 14ug/m ³ (ST ESL) | 03 2014 | TX ESL |
| Crystalline quartz (respirable) (Respirable dust.) | 14808-60-7 | 0.1 mg/m ³ (TWA PEL) | 08 2010 | US CA OEL |
| Crystalline quartz (respirable) (Total dust.) | 14808-60-7 | 0.3 mg/m ³ (TWA PEL) | 08 2010 | US CA OEL |
| Crystalline quartz (respirable) (Respirable.) | 14808-60-7 | 0.1 mg/m ³ (TWA) | 2000 | Z3 |
| Crystalline quartz (respirable) (Total dust.) | 14808-60-7 | 0.3 mg/m ³ (TWA) | 2000 | Z3 |
| Crystalline quartz (respirable) (Respirable.) | 14808-60-7 | 2.4millions of particles per cubic foot of air (TWA) | 2000 | Z3 |
| Calcium carbonate (Respirable.) | 1317-65-3 | 5 mg/m ³ (REL) | 2010 | NIOSH |
| Calcium carbonate (Total) | 1317-65-3 | 10 mg/m ³ (REL) | 2010 | NIOSH |
| Calcium carbonate (Respirable fraction.) | 1317-65-3 | 5 mg/m ³ (PEL) | 02 2006 | OSHA Z1 |
| Calcium carbonate (Total dust.) | 1317-65-3 | 15 mg/m ³ (PEL) | 02 2006 | OSHA Z1 |
| Calcium carbonate | 1317-65-3 | 5 mg/m ³ | 1989 | OSHA Z1A |

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| | | | | |
|---|-----------|---------------------|---------|----------|
| (Respirable fraction.) | | (TWA) | | |
| Calcium carbonate (Total dust.) | 1317-65-3 | 15 mg/m3 (TWA) | 1989 | OSHA Z1A |
| Calcium carbonate (Total dust.) | 1317-65-3 | 15 mg/m3 (TWA) | 06 2008 | TN OEL |
| Calcium carbonate (Respirable fraction.) | 1317-65-3 | 5 mg/m3 (TWA) | 06 2008 | TN OEL |
| Calcium carbonate | 1317-65-3 | 5ug/m3 (AN ESL) | 03 2014 | TX ESL |
| Calcium carbonate | 1317-65-3 | 50ug/m3 (ST ESL) | 03 2014 | TX ESL |

*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

Safety glasses
or
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 | white |
| Physical State | powder |
| Odor | weak characteristic |
| Odour Threshold | no data available |
| pH | no data available |
| Vapor Pressure | no data available |
| Vapor Density (Air = 1) | no data available |
| Bulk density | ca. 55.5 lb/ft ³ (loose) |



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| | |
|---|-------------------|
| Evapouration rate | not applicable |
| Boiling Point | not applicable |
| Melting / Freezing Point | not applicable |
| Water solubility | soluble |
| 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 recommended storage conditions. |
| Possibility of hazardous reactions | No hazardous reactions known. |
| Conditions to avoid | no data available |
| Incompatible materials | Strong acids |
| Hazardous decomposition products | no data available |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|--------------------------|---------------------------|
| Exposure routes | Skin contact, Eye contact |
| Immediate Effects | |

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Acute oral toxicity LD50 (rat) > 5,050 mg/kg

Acute inhalation toxicity LC50 (rat) > 26.1 mg/l
Exposure time: 4 h
Determined in the form of dust.

LC50 (rat) > 100 mg/l
Exposure time: 1 h
Determined in the form of dust.
Extrapolated from the 4 hr LC50.

Acute dermal toxicity LD50 (rabbit) > 2,020 mg/kg

Skin irritation No skin irritation (rabbit)

Eye irritation No eye irritation (rabbit)

Sensitisation Non-sensitizing. (guinea pig)

Assessment repeated dose toxicity

Deltamethrin caused neurobehavioral effects and/or neuropathological changes in animal studies. The toxic effects of Deltamethrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Assessment mutagenicity

Deltamethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Deltamethrin 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

| | | |
|---------------------------------|------------|-----------------------|
| Deltamethrin | 52918-63-5 | Overall evaluation: 3 |
| Crystalline quartz (respirable) | 14808-60-7 | Overall evaluation: 1 |

OSHA

None.

Assessment toxicity to reproduction

Deltamethrin did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

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

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Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

| | |
|--|--|
| Toxicity to fish | LC50 (Oncorhynchus mykiss (rainbow trout)) 0.00091 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient deltamethrin. |
| Toxicity to aquatic invertebrates | EC50 (Daphnia magna (Water flea)) 0.00056 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient deltamethrin. |
| Toxicity to aquatic plants | EC50 (Algae) > 9.1 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient deltamethrin. |
| Biodegradability | Deltamethrin: not rapidly biodegradable |
| Koc | Deltamethrin: Koc: 10240000 |
| Bioaccumulation | Deltamethrin: Bioconcentration factor (BCF) 1,400 Does not bioaccumulate. |
| Mobility in soil | Deltamethrin: Immobile in soil |
| 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. |

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. Follow advice on product label and/or leaflet. |
| Contaminated packaging | 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. Follow advice on product label and/or leaflet. |

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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 | 3077 |
| Class | 9 |
| Packaging group | III |
| Marine pollutant | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DELTAMETHRIN MIXTURE) |

IATA

| | |
|--------------------------|--|
| UN number | 3077 |
| Class | 9 |
| Packaging group | III |
| Environm. Hazardous Mark | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DELTAMETHRIN 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.

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

SECTION 15: REGULATORY INFORMATION**EPA Registration No.** 432-772**US Federal Regulations****TSCA list**

| | |
|---------------------------------|------------|
| Crystalline quartz (respirable) | 14808-60-7 |
| Calcium carbonate | 1317-65-3 |

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.



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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 |
| Calcium carbonate | 1317-65-3 | MN |

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.

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: May be harmful if absorbed through skin.
Avoid contact with skin, eyes and clothing.
Wash thoroughly with soap and water after handling.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

| | |
|---------|--|
| 49CFR | Code of Federal Regulations, Title 49 |
| ACGIH | US. ACGIH Threshold Limit Values |
| CAS-Nr. | Chemical Abstracts Service number |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| IARC | US. IARC Monographs on Occupational Exposures to Chemical Agents |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |

Bayer Environmental Science

SAFETY DATA SHEET



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| | |
|--------|---|
| N.O.S. | Not otherwise specified |
| NTP | US. National Toxicology Program (NTP) Report on Carcinogens |
| OECD | Organization for Economic Co-operation and Development |
| TDG | Transportation of Dangerous Goods |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

NFPA 704 (National Fire Protection Association):

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

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

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

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

Reason for Revision: The following sections have been revised: Section 15: Regulatory information.

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