



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

1/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

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

Product identifier

Trade name BAYER ADVANCED FIRE ANT KILLER READY-TO-USE DUST

Product code (UVP) 06479650

SDS Number 102000012235

EPA Registration No. 72155-32

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.

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

**Product Information
Telephone Number**

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

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Acute toxicity (Oral): Category 4



Signal word: Warning

Hazard statements

Harmful if swallowed.

Precautionary statements

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

2/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

Rinse mouth.
Dispose of contents/container in accordance with local regulation.

Other hazards
No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Beta-Cyfluthrin	68359-37-5	0.5
Pyrogenic (fumed) amorphous silica	112945-52-5	1.0
Crystalline quartz (respirable)	14808-60-7	0.2

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.



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

3/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

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

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.



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

4/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

- Advice on safe handling** Handle and open container in a manner as to prevent spillage.
- Hygiene measures** Keep away from food, drink and animal feedingstuffs. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
- Conditions for safe storage, including any incompatibilities**
- Requirements for storage areas and containers** Keep containers tightly closed in a dry, cool and well-ventilated place. 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
Beta-Cyfluthrin (Particulate.)	68359-37-5	5ug/m3 (AN ESL)	02 2013	TX ESL
Beta-Cyfluthrin (Particulate.)	68359-37-5	50ug/m3 (ST ESL)	02 2013	TX ESL
Beta-Cyfluthrin	68359-37-5	0.01 mg/m3 (TWA)		OES BCS*
Silica, amorphe	7631-86-9	6 mg/m3 (REL)	2010	NIOSH
Silica, amorphe (Particulate.)	7631-86-9	2ug/m3 (AN ESL)	02 2013	TX ESL
Silica, amorphe (Particulate.)	7631-86-9	27ug/m3 (ST ESL)	02 2013	TX ESL
Silica, amorphe	7631-86-9	20millions of particles per cubic foot of air (TWA)	2000	Z3
Silica, amorphe	7631-86-9	0.8 mg/m3 (TWA)	2000	Z3
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	14808-60-7	0.1 mg/m3	06 2008	TN OEL



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

5/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

(respirable) (Respirable dust.)		(TWA)		
Crystalline quartz (respirable) (Particulate.)	14808-60-7	0.27ug/m3 (AN ESL)	02 2013	TX ESL
Crystalline quartz (respirable) (Particulate.)	14808-60-7	14ug/m3 (ST ESL)	02 2013	TX ESL
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA PEL)	08 2010	US CA OEL
Crystalline quartz (respirable) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA PEL)	08 2010	US CA OEL
Crystalline quartz (respirable) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA)	2000	Z3
Crystalline quartz (respirable) (Respirable.)	14808-60-7	2.4millions of particles per cubic foot of air (TWA)	2000	Z3
Crystalline quartz (respirable) (Respirable.)	14808-60-7	0.1 mg/m3 (TWA)	2000	Z3
Calcium sulfate (Inhalable fraction.)	13397-24-5	10 mg/m3 (TWA)	02 2012	ACGIH
Calcium sulfate (Total)	13397-24-5	10 mg/m3 (REL)	2010	NIOSH
Calcium sulfate (Respirable.)	13397-24-5	5 mg/m3 (REL)	2010	NIOSH
Calcium sulfate (Total dust.)	13397-24-5	15 mg/m3 (PEL)	02 2006	OSHA Z1
Calcium sulfate (Respirable fraction.)	13397-24-5	5 mg/m3 (PEL)	02 2006	OSHA Z1
Calcium sulfate (Total dust.)	13397-24-5	15 mg/m3 (TWA)	1989	OSHA Z1A
Calcium sulfate (Respirable fraction.)	13397-24-5	5 mg/m3 (TWA)	1989	OSHA Z1A
Calcium sulfate (Total dust.)	13397-24-5	15 mg/m3 (TWA)	06 2008	TN OEL
Calcium sulfate (Respirable fraction.)	13397-24-5	5 mg/m3 (TWA)	06 2008	TN OEL
Calcium sulfate (Particulate.)	13397-24-5	5ug/m3 (AN ESL)	02 2013	TX ESL
Calcium sulfate (Particulate.)	13397-24-5	50ug/m3 (ST ESL)	02 2013	TX ESL

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



BAYER ADVANCED FIRE ANT KILLER READY-TO-USE DUST

Version 3.0 / USA
102000012235

6/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

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 with side-shields
Skin and body protection	Wear long-sleeved shirt and long pants and shoes plus socks.
General protective measures	Do not allow children or pets to enter the treated area until granules have been watered into the soil and the grass or soil is dry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white to light beige
Physical State	powder
Odor	weak earthy
Odour Threshold	no data available
pH	7.8 - 8.2 at (25 °C) (as aqueous solution)
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Bulk density	30 - 50 lb/ft ³
Evaporation rate	no data available
Boiling Point	not applicable
Melting / Freezing Point	not applicable
Water solubility	insoluble
Minimum Ignition Energy	no data available
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	not applicable
Viscosity	not applicable
Flash point	not applicable



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

7/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

Autoignition temperature	no data available
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Explosivity	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 dangerous reaction known under conditions of normal use.
Conditions to avoid	no data available
Incompatible materials	no data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Skin contact, Eye contact, Ingestion, Inhalation
Immediate Effects	
Eye	Causes eye irritation.
Skin	May cause slight irritation.
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (male rat) 3,084 mg/kg LD50 (female rat) 1,733 mg/kg
Acute inhalation toxicity	LC50 (male/female combined rat) > 1.18 mg/l Exposure time: 4 h Determined in the form of dust. (actual) Highest attainable concentration. LC50 (male/female combined rat) > 4.72 mg/l Exposure time: 1 h Determined in the form of dust.



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

8/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

	Extrapolated from the 4 hr LC50. (actual)
Acute dermal toxicity	LD50 (male/female combined rat) > 2,000 mg/kg
Skin irritation	Slight irritation (rabbit)
Eye irritation	Mild eye irritation. (rabbit)
Sensitisation	Non-sensitizing. (guinea pig)

Assessment repeated dose toxicity

The toxic effects of Beta-Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Assessment mutagenicity

Beta-Cyfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Beta-Cyfluthrin 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	2000
---------------------------------	------------	------

IARC

Pyrogenic (fumed) amorphous silica	112945-52-5	Overall evaluation: 3
Crystalline quartz (respirable)	14808-60-7	Overall evaluation: 1

OSHA

None.

Assessment toxicity to reproduction

Beta-Cyfluthrin 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 Beta-Cyfluthrin is related to parental toxicity.

Assessment developmental toxicity

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

Further information

Acute toxicity studies have been bridged from a similar formulation(s).
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

9/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 0.000068 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient beta-cyfluthrin.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.00029 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient beta-cyfluthrin.
Toxicity to aquatic plants	IC50 (Desmodosmus subspicatus) > 0.01 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient beta-cyfluthrin. No acute toxicity was observed at its limit of water solubility.
Biodegradability	Beta-Cyfluthrin: ; not rapidly biodegradable
Koc	Beta-Cyfluthrin: Koc: 508 - 3179
Bioaccumulation	Beta-Cyfluthrin: Bioconcentration factor (BCF) 506; Does not bioaccumulate.
Mobility in soil	Beta-Cyfluthrin: Immobile in soil
Environmental precautions	Apply this product as specified on the label. Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Never place unused product down any indoor or outdoor drain.
Contaminated packaging	Do not re-use empty containers. Place empty container in trash. 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	3077



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

10/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

Class 9
Packaging group III
Marine pollutant YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(BETA-CYFLUTHRIN MIXTURE)

IATA

UN number 3077
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(BETA-CYFLUTHRIN 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. 72155-32

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

Beta-Cyfluthrin 68359-37-5 25,000lbs

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

US State Right-To-Know Ingredients

Beta-Cyfluthrin	68359-37-5	NJ, RI
Pyrogenic (fumed) amorphous silica	112945-52-5	CA, MN
Crystalline quartz (respirable)	14808-60-7	MN

Canadian Regulations

Canadian Domestic Substance List



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

11/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

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 by inhalation and if swallowed.
Causes eye irritation.
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
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



**BAYER ADVANCED FIRE ANT KILLER READY-TO-USE
DUST**

Version 3.0 / USA
102000012235

12/12
Revision Date: 04/28/2015
Print Date: 06/22/2015

NFPA 704 (National Fire Protection Association):

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

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

Health - 1 Flammability - 0 Physical Hazard - 0 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: 04/28/2015

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.