1. Identification

Product identifier used on the label

**Avert DF Dry Flow Cockroach Bait**

Recommended use of the chemical and restriction on use

Recommended use*: biocide

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller’s published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller’s sales agreement.

Details of the supplier of the safety data sheet

**Company:** BASF Canada Inc.
5025 Creekbank Road
Building A, Floor 2
Mississauga, ON, L4W 0B6, CANADA

**Contact address:** BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932
USA
Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Substance number: 396123
Registration number: EPA Registration number: 499-294
Synonyms: Abamectin B1

2. Hazards Identification


Classification of the product

| Aquatic Acute | 1 | Hazardous to the aquatic environment - acute |
| Aquatic Chronic | 1 | Hazardous to the aquatic environment - chronic |
Combustible Dust  Combustible Dust (1)  Combustible Dust

**Label elements**

**Signal Word:** Warning

**Hazard Statement:**

- May form combustible dust concentration in air.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements (Prevention):**

- P273 Avoid release to the environment.

**Precautionary Statements (Response):**

- P391 Collect spillage.

**Precautionary Statements (Disposal):**

- P501 Dispose of contents/container in accordance with local regulations.

**Hazards not otherwise classified**

**Labeling of special preparations (GHS):**

This product is not combustible in the form in which it is shipped by the manufacturer, but may form a combustible dust through downstream activities (e.g. grinding, pulverizing) that reduce its particle size.

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**3. Composition / Information on Ingredients**


- **Abamectin**
  - CAS Number: 71751-41-2
  - Content (W/W): 0.054 %
  - Synonym: Avermectin B1

- **Silicon dioxide**
  - CAS Number: 7631-86-9
  - Content (W/W): < 5.0%
  - Synonym: Silicon dioxide

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**4. First-Aid Measures**

**Description of first aid measures**

**General advice:**
Remove contaminated clothing.

**If inhaled:**
Keep patient calm, remove to fresh air.
If on skin:
Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Most important symptoms and effects, both acute and delayed
Symptoms: (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed
Note to physician
Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media
Suitable extinguishing media:
dry powder, carbon dioxide, water spray

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
carbon monoxide, carbon dioxide,
If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters
Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways. Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental release measures

Further accidental release measures:
Avoid dispersal of dust in the air (e.g. by clearing dusty surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Personal precautions, protective equipment and emergency procedures
Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**Environmental precautions**
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water. A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities. This product is not regulated by CERCLA ('Superfund').

**Methods and material for containment and cleaning up**
Dike spillage. Sweep/shovel up. Avoid raising dust. Use wet cleaning methods when applicable. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal. Nonsparking tools should be used.

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### 7. Handling and Storage

**Precautions for safe handling**
RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect against heat. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:
The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition. Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

**Conditions for safe storage, including any incompatibilities**
Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage stability:
May be kept indefinitely if stored properly.
If an expiry date is mentioned on the packaging/label this takes priority over the statements on storage duration in this safety data sheet.
Protect from temperatures above: 20 °C
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>ACIGH, US:</th>
<th>ACIGH, US: TWA value 10 mg/m³</th>
<th>Inhalable particles</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon dioxide</td>
<td></td>
<td>TWA value 3 mg/m³</td>
<td>Respirable particles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z3:</td>
<td>TWA value 15 mg/m³</td>
<td>Total dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z3:</td>
<td>TWA value 5 mg/m³</td>
<td>Respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z3:</td>
<td>TWA value 50 millions of particles per cubic foot of air</td>
<td>Total dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z3:</td>
<td>TWA value 15 millions of particles per cubic foot of air</td>
<td>Respirable fraction</td>
<td></td>
</tr>
</tbody>
</table>

Advice on system design:
Whenever possible, engineering controls should be used to minimize the need for personal protective equipment. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.

Hand protection:
Chemical resistant protective gloves. Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:
Safety glasses with side-shields. Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.
General safety and hygiene measures:
The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form: solid
Odour: mild, of yeast
Odour threshold: Not determined due to potential health hazard by inhalation.
Colour: brown
pH value: approx. 4 - 6  
(1 %(m), 20 °C)
Melting point: The product has not been tested.
Boiling point: The product has not been tested.
Flash point: not applicable, the product is a solid
Lower explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Bulk density: approx. 619 kg/m³
(23 °C)
Apparent density after tamping
Vapour density: not applicable
Self-ignition temperature: Based on its structural properties the product is not classified as self-igniting.
Thermal decomposition: carbon monoxide, carbon dioxide
Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.
Viscosity, dynamic: not applicable, the product is a solid
Solubility in water: insoluble
Evaporation rate: not applicable
Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.
Corrosion to metals:
Corrosive effects to metal are not anticipated.

Oxidizing properties:
Not an oxidizer.

**Chemical stability**
The product is stable if stored and handled as prescribed/indicated.

**Possibility of hazardous reactions**
No hazardous reactions if stored and handled as prescribed/indicated.

**Conditions to avoid**
Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded.

**Incompatible materials**
causes

**Hazardous decomposition products**

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
Possible thermal decomposition products:
carbon monoxide, carbon dioxide
Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

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11. **Toxicological information**

**Primary routes of exposure**

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

**Acute Toxicity/Effects**

**Acute toxicity**
Assessment of acute toxicity: Relatively nontoxic after single ingestion. Slightly toxic after short-term skin contact.

**Oral**
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 mg/kg

**Inhalation**
Type of value: LC50
Species: rat
Value: > 5.0 mg/l (calculated)
The product has not been tested. The statement has been derived from the properties of the individual components.

Type of value: ATE
Value: > 5.0000 mg/l
Determined for dust

Dermal
Type of value: LD50
Species: rabbit (male/female)
Value: > 2,000 mg/kg
No mortality was observed.

Assessment other acute effects
Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion
Assessment of irritating effects: May cause slight but temporary irritation to the eyes. Contact may result in skin irritation.

Skin
Species: rabbit
Result: non-irritant
Method: Primary skin irritation test

Eye
Species: rabbit
Result: non-irritant
Method: Primary eye irritation test

Sensitization
Assessment of sensitization: The product has not been tested. The statement has been derived from the properties of the individual components. There is no evidence of a skin-sensitizing potential.

Information on: Abamectin
Guinea pig maximization test
Species: guinea pig
Result: Non-sensitizing.
Method: OECD Guideline 406
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Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Abamectin
Assessment of repeated dose toxicity: Repeated inhalation exposure to small quantities may affect certain organs.  
Repeated oral exposure to small quantities may affect certain organs.

Information on: Silica  
Assessment of repeated dose toxicity: Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs.

Genetic toxicity  
Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity  
Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity  
Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Abamectin  
Assessment of reproduction toxicity: The results of animal studies suggest a fertility impairing effect.

Teratogenicity  
Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Abamectin  
Assessment of teratogenicity: Indications of possible developmental toxicity/teratogenicity were seen in animal studies.
Causes developmental effects in animals at high, maternally toxic doses.

12. Ecological Information

Toxicity  
Aquatic toxicity  
Assessment of aquatic toxicity: Very toxic (acute effect) to fish. Very toxic (acute effect) to aquatic invertebrates. Acutely toxic for aquatic plants.

Toxicity to fish  
Information on: Abamectin  
LC50 (96 h) 0.0036 mg/l, Oncorhynchus mykiss

Aquatic invertebrates
Information on: Abamectin
EC50 (48 h) 0.00034 mg/l, Daphnia magna

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Aquatic plants

Information on: Abamectin
EC50 (72 h) > 0.00159 mg/l, Pseudokirchneriella subcapitata

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Chronic toxicity to fish

Information on: Abamectin
No observed effect concentration (28 d) 0.00052 mg/l, Oncorhynchus mykiss

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Chronic toxicity to aquatic invertebrates

Information on: Abamectin
No observed effect concentration (28 d) 0.0000035 mg/l, Mysidopsis bahia

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Persistence and degradability

Assessment biodegradation and elimination (H2O)
The product has not been tested. The statement has been derived from the properties of the individual components.

Bioaccumulative potential

Assessment bioaccumulation potential
The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential

Information on: Abamectin
Accumulation in organisms is not to be expected.

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Mobility in soil

Assessment transport between environmental compartments
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Abamectin
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.
13. Disposal considerations

Waste disposal of substance:
Must be sent to a suitable incineration plant, observing local regulations.

Container disposal:
Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations.
Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Hazard class: 9
Packing group: III
ID number: UN 3077
Hazard label: 9, EHSM
Marine pollutant: YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains ABAMECTIN)

Air transport
IATA/ICAO

Hazard class: 9
Packing group: III
ID number: UN 3077
Hazard label: 9, EHSM
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains ABAMECTIN)

Further information
Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 kg or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2:10.2.7; IATA: A197; TDS: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Federal Regulations

Registration status:
Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>7631-86-9</td>
<td>Silicon dioxide</td>
</tr>
</tbody>
</table>

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

BASF Risk Assessment, CA Prop. 65:

Based on an evaluation of the product's composition and the use(s), this product does not require a California Proposition 65 Warning.

NFPA Hazard codes:

Health: 1 Fire: 2 Reactivity: 1 Special:

Labeling requirements under FIFRA

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 workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:
KEEP OUT OF REACH OF CHILDREN.
KEEP OUT OF REACH OF DOMESTIC ANIMALS.
HARMFUL IF SWALLOWED.
HARMFUL IF INHALED.
HARMFUL IF ABSORBED THROUGH SKIN.
Avoid inhalation of dusts.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2022/08/09

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.
END OF DATA SHEET