1. PRODUCT IDENTIFICATION

Product identifier on label: DEMON® WP
Product No.: A12839A
Use: Insecticide
Manufacturer: Syngenta Crop Protection, LLC
Post Office Box 18300
Greensboro NC 27419
Manufacturer Phone: 1-800-334-9481
Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications:
- Oral: Category 4
- Dermal: Category 4
- Skin Sensitizer: Category 1B
- Specific Target Organ Toxicity: Repeated Category 2
- Eye Damage/Irritation: Category 2A

Signal Word (OSHA): Warning

Hazard Statements:
- Harmful if swallowed
- Harmful in contact with skin
- May cause an allergic skin reaction
- Causes serious eye irritation
- May cause damage to organs through prolonged or repeated exposure

Precautionary Statements:
- Do not breathe mist, vapors, spray.
- Wash hands and face thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing must not be allowed out of the workplace.
- Wear protective gloves, protective clothing, eye protection.
- Wear eye protection.
- If swallowed: Call a poison center, doctor or Syngenta if you feel unwell. Rinse mouth.
- If on skin: Wash with plenty of soap and water.
- If skin irritation or rash occurs: Get medical advice.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous Silica</td>
<td>Amorphous Silica</td>
<td>Trade Secret</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Calcium Silicate</td>
<td>Calcium Silicate</td>
<td>1344-95-2</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>Other ingredients</td>
<td>Trade Secret</td>
<td>60.0%</td>
</tr>
<tr>
<td>a-cyano-(3-phenoxyphenyl)methyl-cis, trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate</td>
<td>Cypermethrin</td>
<td>52315-07-8</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

**Ingestion:** If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Eye Contact:** If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Skin Contact:** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Inhalation:** If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

**Most important symptoms/effects:**

- Eye irritation
- Skin irritation

**Indication of immediate medical attention and special treatment needed:**

There is no specific antidote if this product is ingested. Treat symptomatically.
5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:
Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:
During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

See also Sec. 7.

Special protective equipment and precautions for firefighters:
Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:
Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:
Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Sweep up material and place in a compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:
This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.

In general personnel handling this material and all conducting equipment should be electrically earthed or grounded. Bulk bags (FIBC) used to contain this material should be Type B, Type C or Type D. Type C bags must be electrically grounded or earthed before powder is charged to or discharged from the bag. If metal or fiber drums are used to contain this material, make certain the metal parts are bonded to the filling equipment and grounded.

This material would not normally become readily charged.

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:
Not Applicable
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR
THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous Silica</td>
<td>80 mg/m³/%SiO₂ TWA (total dust)</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Calcium Silicate</td>
<td>15 mg/m³ TWA (total); 5 mg/m³ TWA (respirable)</td>
<td>10 mg/m³ TWA (irritation)</td>
<td>10 mg/m³ TWA (total); 5 mg/m³ TWA (respirable)</td>
<td>NIOSH</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Cypermethrin</td>
<td>Not Established</td>
<td>Not Established</td>
<td>0.5 mg/m³ TWA</td>
<td>Manufacturer</td>
</tr>
</tbody>
</table>

Appropriate engineering controls:
Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:
Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:
Where eye contact is likely, use dust-proof chemical goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact:
Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear. Stringent housekeeping measures are necessary to prevent translocation of the material from contaminated work surfaces to uncontaminated surfaces (railings, doors, etc.). Unprotected contact with such translocated material can result in paresthesia effects (see Section 11).

Inhalation:
Avoid breathing air from drum headspace. Hydrogen cyanide gas may be released during opening and dispensing, and in case of spills. Use local exhaust ventilation or air-supplied respiratory protection to keep exposures below the TLV Ceiling Limit.

A particulate filter respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH approved respirator with any HE filter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White powder
Odor: Slightly aromatic
Odor Threshold: Not Available
DEMON® WP

Date: 12/16/2014
Replaces: 2/9/2012

pH: 8.9 (1% solution in deionized H2O @ 77°F [25°C])
Melting point/freezing point: Not Available
Initial boiling point and boiling range: Not Applicable
Flash Point (Test Method): Not Applicable
Flammable Limits (% in Air): Not Available
Flammability: Combustible powder

Vapor Pressure: Cypermethrin ca 7.5 x 10(-10) mmHg @ 68°F (20°C) (by extrapolation)
Vapor Density: Not Available
Relative Density: Loose bulk density: 17-23 lb/ft³ ; Packed bulk density: 25-30 lb/ft³
Solubility (ies): Cypermethrin 0.004 mg/l (pH 7)
Partition coefficient: n-octanol/water: Not Available
Autoignition Temperature: Not Available
Decomposition Temperature: Not Available
Viscosity: Not Available
Other:

10. STABILITY AND REACTIVITY
Reactivity: Not reactive.
Chemical stability: Stable under normal use and storage conditions.
Possibility of hazardous reactions: Will not occur.
Conditions to Avoid: None known.
Incompatible materials: None known.
Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATION
Health effects information
Likely routes of exposure: Dermal, Inhalation
Symptoms of exposure: Eye irritation, Skin irritation
Delayed, immediate and chronic effects of exposure: Allergic skin reaction, Paresthesia

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))
Ingestion: Oral (LD50 Rat) : 1800 mg/kg body weight
Dermal: Dermal (LD50 Rat) : 2000 mg/kg body weight
Inhalation: Inhalation (LC50 Rat) : See "Other Toxicity Information", Sec. 11
Eye Contact: Moderately Irritating (Rabbit)
Skin Contact: See "Other Toxicity Information", Sec. 11
Skin Sensitization: A skin sensitizer in animal tests.

Reproductive/Developmental Effects
Cypermethrin: There were no cypermethrin-induced effects in fertility in two separate two-litter three (filial) generation studies in the rat.

Chronic/Subchronic Toxicity Studies
Cypermethrin: NOEL (2-yr) for dogs 5 mg/kg, rats 7.5 mg/kg.
Nervous system effects typical of pyrethroids (motor incoordination, gait abnormalities) in a range of repeated dose studies (dog and rat). Possible nerve fiber degeneration in 14-day study in rats.

Carcinogenicity
Cypermethrin: Two separate 2-year feeding studies in the rat revealed no evidence of carcinogenicity that could be attributable to cypermethrin.

Chemical Name | NTP/IARC/OSHA Carcinogen
--- | ---
Amorphous Silica | IARC Group 3
Calcium Silicate | No
Other ingredients | No
a-cyano-(3-phenoxyphenyl)methyl-cis, trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate | No

Other Toxicity Information
In humans, contact with exposed skin may result in temporary itching, tingling, burning or numbness, called paresthesia. The effect may result from splash, aerosol, or hot vapor contact, or transfer to the face from contaminated gloves and hands. The symptoms normally disappear within 24 hours. Face and genital areas are especially susceptible to this effect. Paresthesia involving the face is also known as "subjective facial sensation" or SFS.

No toxic effects are known to be associated with inhalation of dust from this material.

Skin irritation will probably develop following repeated and/or prolonged contact with human skin.

Toxicity of Other Components
Amorphous Silica
Amorphous Silica is listed as an IARC (Group 3) carcinogen not classifiable as a human carcinogen (No Data Available) with limited animal evidence. Prolonged exposure to amorphous silica may cause damage to respiratory system and irritation to skin and eyes.

Calcium Silicate
May cause skin or eye irritation upon prolonged or repeated contact.

Other ingredients
Not Applicable

Target Organs
Active Ingredients
Cypermethrin: CNS, eye, liver, skin

Inert Ingredients
Amorphous Silica: Respiratory tract, skin, eye
Calcium Silicate: Skin, eye
12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Cypermethrin:
- Fish (Rainbow Trout) 96-hour LC50 0.92 ppb
- Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 1.0 ppb
- Bird (Mallard Duck) 21-day LD50 > 10248 mg/kg

Environmental Fate

Cypermethrin:
- The information presented here is for the active ingredient, cypermethrin.
- Not persistent in soil or water. Immobile in soil. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal:
- Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable
Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification
- Ground Transport - NAFTA
  Not regulated

Comments
- Water Transport - International
  Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Cypermethrin), Marine Pollutant
  Hazard Class: Class 9
  Identification Number: UN 3077
  Packing Group: PG III

Air Transport
- Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Cypermethrin)
- Hazard Class: Class 9
- Identification Number: UN 3077
- Packing Group: PG III

15. REGULATORY INFORMATION

Pesticide Registration:
- 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 as required on the pesticide label:
Warning: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Avoid contact with skin. Wear protective eyewear (goggles, face shield, or safety glasses). Harmful if swallowed, inhaled or absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

EPA Registration Number(s):
100-990; 100-1000

EPCRA SARA Title III Classification:
Section 311/312 Hazard Classes: Acute Health Hazard
Chronic Health Hazard
Fire Hazard

Section 313 Toxic Chemicals: None

California Proposition 65:
This product does not contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

CERCLA/SARA 304 Reportable Quantity (RQ):
None

RCRA Hazardous Waste Classification (40 CFR 261):
Not Applicable

TSCA Status:
Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS Hazard Ratings

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Syngenta Hazard Category: C,S

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 8/6/1998
Revision Date: 12/16/2014
Replaces: 2/9/2012

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.