1. IDENTIFICATION

Product name: GRAZON™ P+D Herbicide

Recommended use of the chemical and restrictions on use
Identified uses: End use herbicide product

COMPANY IDENTIFICATION
DOW AGROSCIENCES LLC
9330 ZIONSVILLE RD
INDIANAPOLIS IN 46268-1053
UNITED STATES

Customer Information Number: 800-992-5994
info@dow.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 800-992-5994
Local Emergency Contact: 352-323-3500

2. HAZARDS IDENTIFICATION

Hazard classification
This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.
Eye irritation - Category 2A
Skin sensitisation - Category 1

Label elements
Hazard pictograms

Signal word: WARNING!
Hazards
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements
Prevention
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear eye protection/ face protection.
Wear protective gloves.

Response
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Wash contaminated clothing before reuse.

Disposal
Dispose of contents/ container to an approved waste disposal plant.

Other hazards
no data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt</td>
<td>18584-79-7</td>
<td>39.6%</td>
</tr>
<tr>
<td>Picloram triisopropanolamine salt</td>
<td>6753-47-5</td>
<td>10.2%</td>
</tr>
<tr>
<td>Alkylphenol alkoxylate</td>
<td>69029-39-6</td>
<td>5.1%</td>
</tr>
<tr>
<td>isopropanol</td>
<td>67-63-0</td>
<td>1.6%</td>
</tr>
<tr>
<td>Triisopropanolamine</td>
<td>122-20-3</td>
<td>1.0%</td>
</tr>
<tr>
<td>Balance</td>
<td>Not available</td>
<td>42.5%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Description of first aid measures
**General advice:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

**Skin contact:** Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.

**Eye contact:** Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

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### 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

**Unsuitable extinguishing media:** no data available

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen chloride. Carbon monoxide. Carbon dioxide. Combustion products may include trace amounts of: Phosgene.

**Unusual Fire and Explosion Hazards:** This material will not burn until the water has evaporated. Residue can burn.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause
environmental damage. Review the “Accidental Release Measures” and the “Ecological Information” sections of this (M)SDS.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Ventilate area of leak or spill. Keep upwind of spill. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to section 7, Handling, for additional precautionary measures.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

### 7. HANDLING AND STORAGE

**Precautions for safe handling:** Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. Keep container closed.

**Conditions for safe storage:** Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Exposure limits are listed below, if they exist.

<table>
<thead>
<tr>
<th>Component</th>
<th>Regulation</th>
<th>Type of listing</th>
<th>Value/Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkylphenol alkoxylate</td>
<td>Dow IHG</td>
<td>TWA</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>isopropanol</td>
<td>ACGIH</td>
<td>TWA</td>
<td>200 ppm</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>400 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>980 mg/m³ 400 ppm</td>
</tr>
<tr>
<td>Triisopropanolamine</td>
<td>Dow IHG</td>
<td>TWA</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.
Exposure controls
Engineering controls: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

Individual protection measures
Eye/face protection: Use chemical goggles.
Skin protection
Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber (“nitrile” or “NBR”). Polyvinyl chloride (“PVC” or “vinyl”). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.
Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.
Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow to brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohols</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.8 - 7.8 pH Electrode</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No test data available</td>
</tr>
<tr>
<td>Boiling point (760 mmHg)</td>
<td>82 ºC (180 ºF)</td>
</tr>
<tr>
<td>Flash point</td>
<td>closed cup &gt; 100 ºC (&lt; 212 ºF)</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>No test data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No test data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No test data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>32 hPa at 20 ºC (68 ºF)</td>
</tr>
<tr>
<td>Relative Vapor Density (air = 1)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
Relative Density (water = 1) 1.143 at 20 °C (68 °F) Literature
Water solubility Soluble
Partition coefficient: n-octanol/water no data available
Auto-ignition temperature No test data available
Decomposition temperature No test data available
Dynamic Viscosity No test data available
Kinematic Viscosity No test data available
Explosive properties no data available
Oxidizing properties no data available
Liquid Density 1.149 g/cm³ at 20 °C (68 °F)
Molecular weight no data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: no data available

Chemical stability: Thermally stable at typical use temperatures.

Possibility of hazardous reactions: Polymerization will not occur.

Conditions to avoid: Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.


Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Hydrogen chloride. Nitrogen oxides. Toxic gases are released during decomposition. Decomposition products can include trace amounts of: Phosgene.

11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

Acute toxicity

Acute oral toxicity
Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

Single dose oral LD50 has not been determined. For similar material(s):
LD50, Rat, 2,598 mg/kg
Acute dermal toxicity
Prolonged skin contact is unlikely to result in absorption of harmful amounts.

The dermal LD50 has not been determined. For similar material(s):
LD50, Rabbit, > 5,000 mg/kg

Acute inhalation toxicity
Prolonged excessive exposure may cause adverse effects. Based on the available data, respiratory irritation was not observed.

The LC50 has not been determined. For similar material(s): Maximum attainable concentration.
LC50, Rat, 4 Hour, dust/mist, > 1.38 mg/l No deaths occurred at this concentration.

Skin corrosion/irritation
Brief contact is essentially nonirritating to skin.
Prolonged contact may cause slight skin irritation with local redness.
Repeated contact may cause slight skin irritation with local redness.

Serious eye damage/eye irritation
May cause moderate eye irritation.
May cause slight corneal injury.
Effects may be slow to heal.

Sensitization
For similar material(s):
Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)
For the active ingredient(s):
In animals, effects have been reported on the following organs:
Kidney.
Liver.
Eye.
Thyroid.
Observations in animals include:
Nausea and/or vomiting.

Carcinogenicity
For similar active ingredient(s). Picloram acid. Did not cause cancer in laboratory animals.

For similar active ingredient(s). Various animal cancer tests have shown no reliably positive association between 2,4-D exposure and cancer. Epidemiology studies on herbicide use have been both positive and negative with the majority being negative.

Teratogenicity
For the active ingredient(s): 2,4-Dichlorophenoxyacetic acid, Triisopropanolamine salt. Has caused birth defects in lab animals only at doses producing severe toxicity in the mother. For the minor component(s): Isopropanol has been toxic to the fetus in laboratory animals at doses toxic to the mother.

**Reproductive toxicity**
For similar active ingredient(s), 2,4-Dichlorophenoxyacetic acid. In laboratory animals, excessive doses toxic to the parent animals caused decreased weight and survival of offspring.

**Mutagenicity**
For the component(s) tested: In vitro genetic toxicity studies were negative. For the majority of components: Animal genetic toxicity studies were negative.

**Aspiration Hazard**
Based on physical properties, not likely to be an aspiration hazard.

---

**12. ECOLOGICAL INFORMATION**

*Ecotoxicological information on this product or its components appear in this section when such data is available.*

**Toxicity**

**2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt**

**Acute toxicity to fish**
Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).
LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 317 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
LC50, Daphnia magna (Water flea), static test, 48 Hour, 748 mg/l

**Acute toxicity to algae/aquatic plants**
ErC50, Pseudokirchneriella subcapitata (green algae), 5 d, 103 mg/l
EC50, Lemna minor (duckweed), 14 d, 2.37 mg/l

**Toxicity to Above Ground Organisms**
Material is moderately toxic to birds on an acute basis (LD50 between 51 and 500 mg/kg).
oral LD50, Colinus virginianus (Bobwhite quail), 405 mg/kg
dietary LC50, Colinus virginianus (Bobwhite quail), > 5,620 ppm

**Picloram triisopropanolamine salt**

**Acute toxicity to fish**
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).
LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 51 mg/l

**Acute toxicity to aquatic invertebrates**
LC50, Daphnia magna (Water flea), static test, 48 Hour, 125 mg/l
Chronic toxicity to fish
NOEC, Pimephales promelas (fathead minnow), 28 d, 7.19 mg/l

**Alkylphenol alkoxylate**

**Acute toxicity to fish**
Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).
LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 3.7 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
LC50, Daphnia magna (Water flea), 48 Hour, 10.5 mg/l, OECD Test Guideline 202 or Equivalent

**Toxicity to Above Ground Organisms**
dietary LC50, Apis mellifera (bees), 2 d, > 105 micrograms/bee
contact LD50, Apis mellifera (bees), 2 d, > 100 micrograms/bee
oral LD50, Colinus virginianus (Bobwhite quail), > 2,250 mg/kg

**isopropanol**

**Acute toxicity to fish**
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
LC50, Pimephales promelas (fathead minnow), flow-through test, 96 Hour, 9,640 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
LC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**
NOEC, alga Scenedesmus sp., static test, 7 d, Growth inhibition (cell density reduction), 1,800 mg/l
ErC50, alga Scenedesmus sp., static test, 72 Hour, Growth rate inhibition, > 1,000 mg/l

**Toxicity to bacteria**
EC50, activated sludge, > 1,000 mg/l

**Chronic toxicity to aquatic invertebrates**
NOEC, Daphnia magna (Water flea), semi-static test, 21 d, 30 mg/l

**Triisopropanolamine**

**Acute toxicity to fish**
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
LC50, Leuciscus idus (Golden orfe), static test, 96 Hour, 3,158.4 mg/l, DIN 38412

**Acute toxicity to aquatic invertebrates**
EC50, Daphnia magna (Water flea), static test, 48 Hour, > 500 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**
EC50, alga Scenedesmus sp., static test, 72 Hour, Growth rate inhibition, 710 mg/l, EU Method C.3 (Algal Inhibition test)

**Toxicity to bacteria**
EC10, activated sludge, 30 min, > 1,195 mg/l

**Balance**

**Acute toxicity to fish**
No relevant data found.

**Persistence and degradability**

**2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt**

*Biodegradability:* For similar active ingredient(s). 2,4-Dichlorophenoxyacetic acid. Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

**Picloram triisopropanolamine salt**

*Biodegradability:* For similar active ingredient(s). Picloram. Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Biodegradation may occur under aerobic conditions (in the presence of oxygen). Surface photodegradation is expected with exposure to sunlight.

**Alkylphenol alkoxylate**

*Biodegradability:* Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%).

**Theoretical Oxygen Demand:** 2.35 mg/mg

**Chemical Oxygen Demand:** 1.78 mg/mg

**isopropanol**

*Biodegradability:* Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

**Biodegradation:** 95 %

**Exposure time:** 21 d

**Method:** OECD Test Guideline 301E or Equivalent

10-day Window: Pass

**Biodegradation:** 53 %

**Exposure time:** 5 d

**Method:** Other guidelines

**Theoretical Oxygen Demand:** 2.40 mg/mg Estimated.

**Chemical Oxygen Demand:** 2.09 mg/mg Estimated.

**Biological oxygen demand (BOD)**

<table>
<thead>
<tr>
<th>Incubation Time</th>
<th>BOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 d</td>
<td>20 - 72 %</td>
</tr>
<tr>
<td>20 d</td>
<td>78 - 86 %</td>
</tr>
</tbody>
</table>
Photodegradation
Test Type: Half-life (indirect photolysis)
Sensitizer: OH radicals
Atmospheric half-life: 1.472 d
Method: Estimated.

Triisopropanolamine
Biodegradability: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%). Biodegradation rate may increase in soil and/or water with acclimation. Material is not readily biodegradable according to OECD/EEC guidelines.
10-day Window: Fail
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301F or Equivalent
Theoretical Oxygen Demand: 2.35 mg/mg

Balance
Biodegradability: No relevant data found.

Bioaccumulative potential

2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt
Bioaccumulation: No bioconcentration is expected because of the relatively high water solubility. For similar active ingredient(s). 2,4-Dichlorophenoxyacetic acid. Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Picloram triisopropanolamine salt
Bioaccumulation: No data available for this product. For similar active ingredient(s). Picloram. Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Alkylphenol alkoxylate
Bioaccumulation: No bioconcentration is expected because of the relatively high water solubility. May foam in water.

isopropanol
Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): 0.05 Measured

Triisopropanolamine
Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): -0.015 at 23 °C Measured
Bioconcentration factor (BCF): < 0.57 Fish. 42 d Measured

Balance
Bioaccumulation: No relevant data found.
Mobility in soil

2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt
For similar active ingredient(s).
2,4-Dichlorophenoxyacetic acid.
Potential for mobility in soil is very high (Koc between 0 and 50).

Picloram triisopropanolamine salt
For similar active ingredient(s).
Picloram.
Potential for mobility in soil is very high (Koc between 0 and 50).

Alkylphenol alkoxylate
No data available.

isopropanol
Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient (Koc): 1.1 Estimated.

Triisopropanolamine
Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient (Koc): 10 Estimated.

Balance
No relevant data found.

13. DISPOSAL CONSIDERATIONS

Disposal methods: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

14. TRANSPORT INFORMATION

DOT

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Environmentally hazardous substance, liquid, n.o.s.(2,4-D Salt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN 3082</td>
</tr>
<tr>
<td>Class</td>
<td>9</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Reportable Quantity</td>
<td>2,4-D Salt</td>
</tr>
</tbody>
</table>

Classification for SEA transport (IMO-IMDG):
Not regulated for transport
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

Consult IMO regulations before transporting ocean bulk load.

Classification for AIR transport (IATA/ICAO):
Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
Acute Health Hazard
Chronic Health Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313
Components
isopropanol
CASRN
67-63-0

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

United States TSCA Inventory (TSCA)
This product contains chemical substance(s) exempt from U.S. EPA TSCA Inventory requirements. It is regulated as a pesticide subject to Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements.

**Federal Insecticide, Fungicide and Rodenticide Act**

EPA Registration Number: 62719-182

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:

**DANGER**

Corrosive
Causes irreversible eye damage
Harmful if swallowed or inhaled
Harmful if absorbed through skin

---

**16. OTHER INFORMATION**

**Hazard Rating System**

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Revision**

Identification Number: 101192176 / A211 / Issue Date: 05/04/2015 / Version: 3.0
DAS Code: GF-2179

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>USA. ACGIH Threshold Limit Values (TLV)</th>
<th>Dow IHG</th>
<th>Dow Industrial Hygiene Guideline</th>
<th>OSHA Z-1</th>
<th>USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants</th>
<th>STEL</th>
<th>Short-term exposure limit</th>
<th>TWA</th>
<th>8-hour, time-weighted average</th>
</tr>
</thead>
</table>

**Information Source and References**

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