

# SAFETY DATA SHEET

## DOW AGROSCIENCES LLC

**Product name:** GRASP™ Xtra Herbicide

**Issue Date:** 05/20/2016

**Print Date:** 05/20/2016

DOW AGROSCIENCES LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

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## 1. IDENTIFICATION

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**Product name:** GRASP™ Xtra 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

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## 2. HAZARDS IDENTIFICATION

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### 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

Specific target organ toxicity - repeated exposure - Category 2

### Label elements

#### Hazard pictograms



Signal word: **WARNING!**

**Hazards**

May cause an allergic skin reaction.

Causes serious eye irritation.

May cause damage to organs (Kidney) through prolonged or repeated exposure.

**Precautionary statements****Prevention**

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

Wash skin thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/ eye protection/ face protection.

**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.

Get medical advice/ attention if you feel unwell.

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

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

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This product is a mixture.

<b>Component</b>	<b>CASRN</b>	<b>Concentration</b>
Triclopyr Triethylamine Salt	57213-69-1	23.06%
Penoxsulam	219714-96-2	2.77%
Propylene glycol	57-55-6	4.5%
Ethanol	64-17-5	1.0%
Balance	Not available	68.67%

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**4. FIRST AID MEASURES**

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**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. Suitable emergency safety shower facility should be available in work area.

**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**

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**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.

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## 6. ACCIDENTAL RELEASE MEASURES

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

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

**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.

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## 7. HANDLING AND STORAGE

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**Precautions for safe handling:** Keep out of reach of children. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid breathing vapor or mist. Do not swallow. Wash thoroughly after handling. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

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

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Triclopyr Triethylamine Salt	Dow IHG	TWA	2 mg/m <sup>3</sup>
	Dow IHG	TWA	SKIN, DSEN, BEI
Propylene glycol	US WEEL	TWA	10 mg/m <sup>3</sup>
Ethanol	ACGIH	TWA	1,000 ppm
	ACGIH	STEL	1,000 ppm
	OSHA Z-1	TWA	1,900 mg/m <sup>3</sup> 1,000 ppm

CAL PEL	PEL	1,900 mg/m <sup>3</sup>	1,000 ppm
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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 local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. 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: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. 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, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

Physical state	Liquid.
Color	Off-white
Odor	Mild
Odor Threshold	No data available
pH	6.68 <i>pH Electrode</i> 1% Aqueous solution
Melting point/range	Not applicable
Freezing point	No data available
Boiling point (760 mmHg)	No data available

<b>Flash point</b>	<b>closed cup</b> > 100 °C (> 212 °F) <i>Closed Cup</i>
<b>Evaporation Rate (Butyl Acetate = 1)</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Relative Vapor Density (air = 1)</b>	No data available
<b>Relative Density (water = 1)</b>	No data available
<b>Water solubility</b>	forms a suspension
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No test data available
<b>Dynamic Viscosity</b>	No data available
<b>Kinematic Viscosity</b>	No data available
<b>Explosive properties</b>	No
<b>Oxidizing properties</b>	No significant increase (>5C) in temperature.
<b>Liquid Density</b>	1.0926 g/ml at 20 °C (68 °F) <i>Digital density meter</i>
<b>Molecular weight</b>	No data available

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

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** No dangerous reaction known under conditions of normal use.

**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.

**Incompatible materials:** Avoid contact with: Acids. Bases. Oxidizers.

**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.

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information appears 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.

As product:

LD50, Rat, female, > 3,000 - < 5,000 mg/kg

**Acute dermal toxicity**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product:

LD50, Rat, male and female, > 5,000 mg/kg No deaths occurred at this concentration.

**Acute inhalation toxicity**

No adverse effects are anticipated from single exposure to mist. Based on the available data, respiratory irritation was not observed.

As product:

LC50, Rat, male and female, 4 Hour, dust/mist, > 4.22 mg/l No deaths occurred at this concentration.

**Skin corrosion/irritation**

Brief contact may cause slight skin irritation with local redness.

May cause drying and flaking of the skin.

Effects may be slow to heal.

**Serious eye damage/eye irritation**

May cause moderate eye irritation.

May cause slight corneal injury.

Effects may be slow to heal.

**Sensitization**

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.

**Carcinogenicity**

Ethanol when not consumed in an alcoholic beverage is not classifiable as a human carcinogen. For the active ingredient(s): Did not cause cancer in laboratory animals.

**Teratogenicity**

For the minor component(s): Has caused birth defects in lab animals at high doses. For the active ingredient(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

### Reproductive toxicity

For similar active ingredient(s). Triclopyr. In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. For the active ingredient(s): Penoxsulam. In animal studies, did not interfere with reproduction.

### Mutagenicity

For the active ingredient(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Contains component(s) which were negative in some animal genetic toxicity studies and positive in others.

### Aspiration Hazard

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

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## 12. ECOLOGICAL INFORMATION

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*Ecotoxicological information appears in this section when such data is available.*

### Toxicity

#### Triclopyr Triethylamine Salt

##### Acute toxicity to fish

For similar material(s):

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, Cyprinus carpio (Carp), 96 Hour, 350 mg/l

LC50, Lepomis macrochirus (Bluegill sunfish), semi-static test, 96 Hour, > 100 mg/l

##### Acute toxicity to aquatic invertebrates

EC50, eastern oyster (*Crassostrea virginica*), static test, 48 Hour, 56 - 87 mg/l

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, > 448 mg/l

##### Acute toxicity to algae/aquatic plants

ErC50, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, Growth rate inhibition, 107 mg/l

ErC50, blue-green alga *Anabaena flos-aquae*, Growth inhibition, 72 Hour, > 100 mg/l

EC50, *Lemna gibba*, Growth inhibition, 7 d, > 1,000 mg/l

Based on information for a similar material:

ErC50, *Myriophyllum spicatum*, 14 d, 0.241 mg/l

Based on information for a similar material:

NOEC, *Myriophyllum spicatum*, 14 d, 0.0191 mg/l

##### Toxicity to Above Ground Organisms

Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).

Material is moderately toxic to birds on an acute basis (LD50 between 51 and 500 mg/kg).

oral LD50, *Colinus virginianus* (Bobwhite quail), 300mg/kg bodyweight.

contact LD50, *Apis mellifera* (bees), 48 Hour, > 100µg/bee



dietary LC50, *Colinus virginianus* (Bobwhite quail), 11622mg/kg diet.

**Penoxsulam**

**Acute toxicity to fish**

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50, *Oncorhynchus mykiss* (rainbow trout), static test, 96 Hour, > 100 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, > 100 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

ErC50, *Pseudokirchneriella subcapitata* (green algae), static test, 72 Hour, Growth rate inhibition, 0.126 mg/l, OECD Test Guideline 201

EbC50, *Lemna minor* (duckweed), 14 d, Biomass, 0.00329 mg/l, OECD 221.

**Toxicity to bacteria**

EC50, activated sludge, 3 Hour, > 1,000 mg/l

**Toxicity to Above Ground Organisms**

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).

oral LD50, *Anas platyrhynchos* (Mallard duck), mortality, > 2000mg/kg bodyweight.

dietary LC50, *Colinus virginianus* (Bobwhite quail), 8 d, mortality, > 5063mg/kg diet.

contact LD50, *Apis mellifera* (bees), 48 Hour, mortality, > 100µg/bee

oral LD50, *Apis mellifera* (bees), 48 Hour, mortality, > 100µg/bee

**Toxicity to soil-dwelling organisms**

LC50, *Eisenia fetida* (earthworms), 14 d, > 1,000 mg/kg

NOEC, *Eisenia fetida* (earthworms), 56 d, 1,000 mg/kg

**Propylene glycol**

**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, *Oncorhynchus mykiss* (rainbow trout), static test, 96 Hour, 40,613 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

LC50, *Ceriodaphnia dubia* (water flea), static test, 48 Hour, 18,340 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

ErC50, *Pseudokirchneriella subcapitata* (green algae), 96 Hour, Growth rate inhibition, 19,000 mg/l, OECD Test Guideline 201

**Toxicity to bacteria**

NOEC, *Pseudomonas putida*, 18 Hour, > 20,000 mg/l

**Chronic toxicity to aquatic invertebrates**

NOEC, *Ceriodaphnia dubia* (water flea), semi-static test, 7 d, number of offspring, 13,020 mg/l

**Ethanol****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, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 Hour, 11,200 - 13,000 mg/l, Method Not Specified.

**Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), 48 Hour, 5,414 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

EbC50, Skeletonema costatum (marine diatom), 5 d, Biomass, 10,943 - 11,619 mg/l, OECD Test Guideline 201 or Equivalent

**Balance****Acute toxicity to fish**

No relevant data found.

**Persistence and degradability****Triclopyr Triethylamine Salt**

**Biodegradability:** For similar active ingredient(s). Triclopyr. Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%).

For similar active ingredient(s). Triclopyr. 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.

**Penoxsulam**

**Biodegradability:** Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Fail

**Biodegradation:** 14.7 %

**Exposure time:** 28 d

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

**Photodegradation**

**Sensitizer:** OH radicals

**Atmospheric half-life:** 2.1 Hour

**Method:** Estimated.

**Propylene glycol**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

10-day Window: Pass

**Biodegradation:** 81 %

**Exposure time:** 28 d

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

10-day Window: Not applicable

**Biodegradation:** 96 %

**Exposure time:** 64 d

**Method:** OECD Test Guideline 306 or Equivalent

**Theoretical Oxygen Demand:** 1.68 mg/mg

**Chemical Oxygen Demand:** 1.53 mg/mg

**Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	69.000 %
10 d	70.000 %
20 d	86.000 %

**Photodegradation**

**Atmospheric half-life:** 10 Hour

**Method:** Estimated.

### Ethanol

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

10-day Window: Pass

**Biodegradation:** > 70 %

**Exposure time:** 5 d

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

**Theoretical Oxygen Demand:** 2.08 mg/mg

**Photodegradation**

**Test Type:** Half-life (indirect photolysis)

**Sensitizer:** OH radicals

**Atmospheric half-life:** 2.99 d

**Method:** Estimated.

### Balance

**Biodegradability:** No relevant data found.

### **Bioaccumulative potential**

#### Triclopyr Triethylamine Salt

**Bioaccumulation:** For similar active ingredient(s). Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

#### Penoxsulam

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** -0.602 Measured

#### Propylene glycol

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** -1.07 Measured

**Bioconcentration factor (BCF):** 0.09 Estimated.

### Ethanol

**Bioaccumulation:** Bioaccumulation is unlikely. Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** -0.31 Measured

#### **Balance**

**Bioaccumulation:** No relevant data found.

#### **Mobility in soil**

##### **Triclopyr Triethylamine Salt**

For similar active ingredient(s).

Potential for mobility in soil is very high (Koc between 0 and 50).

##### **Penoxsulam**

Potential for mobility in soil is high (Koc between 50 and 150).

**Partition coefficient (Koc):** 73 Measured

##### **Propylene glycol**

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Potential for mobility in soil is very high (Koc between 0 and 50).

**Partition coefficient (Koc):** < 1 Estimated.

##### **Ethanol**

Potential for mobility in soil is very high (Koc between 0 and 50).

**Partition coefficient (Koc):** 1.0 Estimated.

#### **Balance**

No relevant data found.

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### **13. DISPOSAL CONSIDERATIONS**

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**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.

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### **14. TRANSPORT INFORMATION**

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#### **DOT**

Not regulated for transport

#### **Classification for SEA transport (IMO-IMDG):**

##### **Proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.(Triclopyr Triethylamine Salt, Penoxsulam)

<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	Triclopyr Triethylamine Salt, Penoxsulam
<b>Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code</b>	Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

<b>Proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s.(Triclopyr Triethylamine Salt, Penoxsulam)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III

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.

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## 15. REGULATORY INFORMATION

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**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**

<b>Components</b>	<b>CASRN</b>
Triclopyr Triethylamine Salt	57213-69-1

**Pennsylvania Worker and Community Right-To-Know Act:**

The following chemicals are listed because of the additional requirements of Pennsylvania law:

<b>Components</b>	<b>CASRN</b>
Propylene glycol	57-55-6
Ethanol	64-17-5

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

**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: 62719-610

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

Harmful if swallowed

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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**16. OTHER INFORMATION**


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**Hazard Rating System****NFPA**

Health	Fire	Reactivity
2	1	0

**Revision**

Identification Number: 101224335 / A211 / Issue Date: 05/20/2016 / Version: 3.2

DAS Code: GF-2345

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

**Legend**

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
CAL PEL	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Dow IHG	Dow Industrial Hygiene Guideline
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
PEL	Permissible exposure limit
SKIN, DSEN, BEI	Absorbed via Skin, Skin Sensitizer, Biological Exposure Indices
STEL	Short-term exposure limit
TWA	8-hour, time-weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

**Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

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