



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Formulator:** Gowan Company  
P.O. Box 5569  
Yuma, Arizona 85366-5569  
(800) 883-1844

**Emergency Phone:** (928) 783-3803  
**For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC®:** **Inside the U.S.:** (800) 424-9300  
**Outside the U.S.:** (703) 527-3887  
(888) 478-0798  
**For Medical Emergency:**

**Product:** Scythe® Herbicide

**EPA Signal Word:** Warning

**EPA Registration No.:** 10163-325

### 2. HAZARDS IDENTIFICATION

#### Physical Properties

**Appearance:** Colorless to yellow liquid

**Odor:** Waxy

#### Hazards of product:

WARNING! May cause severe eye irritation. Causes skin irritation. May cause respiratory tract irritation.

#### OSHA Hazard Communication Standard

This product is a "hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### Potential Health Effects

**Eye Contact:** May cause severe eye irritation. May cause corneal injury.

**Skin contact:** Prolonged or repeated exposure may cause moderate skin irritation.

**Skin Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts.

**Inhalation:** Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs.

**Ingestion:** Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS #
Pelargonic acid (57%)	112-05-0
Solvent refined heavy paraffinic distillate (petroleum) (0.3-10.5%)	64741-88-4
Petroleum distillates, solvent-dewaxed, heavy paraffinic (19.5-29.7%)	64742-65-0

Only the identities of the active ingredient(s) and any *hazardous* inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

### 4. FIRST AID MEASURES

**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.

**Skin Contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**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 for treatment advice.

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## 4. FIRST AID MEASURES - continued

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**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.

### Note to Physician

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL TOLL FREE: (888) 478-0798

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. FIRE FIGHTING MEASURES

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**Appropriate Extinguishing Media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

**Fire Fighting Guidance:** Keep people away. Isolate fire and deny unnecessary entry. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by slushing with water to protect personnel and minimize property damage. 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 firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

**Unusual Fire, Explosion, and Reactivity Hazards:** Container may vent and/or rupture due to fire. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide and carbon dioxide.

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## 6. ACCIDENTAL RELEASE MEASURES

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### In Case of Spills or Leaks

**Steps to be Taken if Material is released or Spilled:** Contain spilled material if possible. Small spills: Absorb with materials such as clay, dirt, sand, or Zorb-all<sup>®</sup>. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Gowan Company for clean-up assistance.

**Personal Precautions:** 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.

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## 7. HANDLING AND STORAGE

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### Handling

**General 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.

**Other precautions:** Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

### 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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Exposure Limits

Component	List	Type	Value
Solvent refined heavy paraffinic distillate (petroleum)	OSHA Table Z-1	PEL	2,000 mg/m <sup>3</sup> 500 ppm
Petroleum distillates, solvent-dewaxed, heavy paraffinic	OSHA Table	PEL	2,000 mg/m <sup>3</sup> 500 ppm

### Manufacturing and Packaging Employees

<b>Eye/Face</b>	Use chemical goggles
<b>Skin Protection</b>	Wear clean, body-covering clothing
<b>Hand protection:</b>	Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: chlorinated polyethylene, neoprene, polyethylene, ethyl vinyl alcohol laminate (EVAL), polyvinyl chloride (PVC or vinyl), Viton. Examples of acceptable glove barrier materials include: butyl rubber, natural rubber (latex), nitrile/butadiene rubber (nitrile or NBR), polyvinyl alcohol (PVA).
<b>Respiratory Protection</b>	Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge,
<b>Ingestion</b>	Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.
<b>Engineering Controls</b>	
<b>Ventilation</b>	Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Physical State:</b>	Liquid
<b>Color:</b>	Colorless to yellow
<b>Odor:</b>	Waxy
<b>Flash Point:</b>	>94°C (>200.1°F) <i>Closed Cup</i>
<b>Flammable Limits in Air</b>	Lower: No test data available Upper: No test data available
<b>Autoignition Temperature</b>	No test data available
<b>Vapor Pressure</b>	20 mmHg @ 153°C <i>Literature</i>
<b>Boiling Point (760 mmHg):</b>	230-237°C (446 - 459°F) <i>Literature</i>
<b>Vapor Density (air = 1)</b>	No test data available
<b>Specific Gravity (H<sub>2</sub>O =1)</b>	0.9 <i>Literature</i>
<b>Freezing Point</b>	No test data available
<b>Melting Point:</b>	12.5° C (54.5° F) <i>Literature</i>
<b>Solubility in Water (by weight)</b>	emulsifies in water
<b>pH</b>	3.8 (1% aqueous solution) <i>Literature</i>

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## 10. STABILITY AND REACTIVITY

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<b>Stability:</b>	Unstable at elevated temperatures
<b>Hazardous Polymerization:</b>	Will not occur
<b>Thermal Decomposition:</b>	Decomposition products depend upon temperature, air supply and the presence of other materials.
<b>Conditions To Avoid:</b>	Exposure to elevated temperatures can cause product to decompose.

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## 11. TOXICOLOGICAL INFORMATION

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### Acute Toxicity/Irritation Studies

**Ingestion:** LD<sub>50</sub>, rat >5,000 mg/kg  
**Skin Absorption:** LD<sub>50</sub>, Rabbit >2,000  
**Inhalation:** LC<sub>50</sub>, 4h, Rat >5.29 mg/l

### Repeated Dose Toxicity

For the active ingredient(s): Repeated skin application to laboratory animals did not produce systemic toxicity.

### Chronic Toxicity and Carcinogenicity

For the active ingredient(s): Did not cause cancer in animal skin painting studies.

### Developmental Toxicity

For the active ingredient(s): Did not cause birth defects or any other fetal effects in laboratory animals.

### Genetic Toxicology

For the solvent(s): Genetic toxicity studies on tested components were predominantly negative.

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## 12. ECOLOGICAL INFORMATION

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### CHEMICAL FATE

#### Pelargonic acid

##### **Movement & Partitioning**

Potential for mobility in soil is very high (Koc between 0 and 50). Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

**Henry's Law Constant (H):** 3.3e-6 4.0e-6 Estimated

**Partition coefficient, n-octanol/water (log Pow):** 3.42 Measured

**Partition coefficient, soil organic carbon/water (Koc):** 47.3 Estimated

**Bioconcentration Factor (BCF):** 3.2; /estimated

##### **Persistence and Degradability**

No relevant information found.

#### Solvent refined heavy paraffinic distillate (petroleum)

##### **Movement & Partitioning**

Bioconcentration potential is high (BCF >3000 or Log Pow between 5 and 7).

**Partition coefficient, n-octanol/water (log Pow):** 3.9 – 6 Estimated

##### **Persistence and Degradability**

Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for biodegradability. Material is inherently biodegradable (reaches >20% biodegradation in OECD test(s) for inherent biodegradability).

#### Petroleum distillates, solvent-dewaxed, heavy paraffinic

##### **Movement & Partitioning**

Bioconcentration potential is high (BCF >3000 or Log Pow between 5 and 7).

**Partition coefficient, n-octanol/water (log Pow):** 3.9 – 6 Estimated

##### **Persistence and Degradability**

Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for biodegradability. Material is inherently biodegradable (reaches >20% biodegradation in OECD test(s) for inherent biodegradability).

### ECOTOXICITY

#### Pelargonic acid

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).

##### **Fish Acute & Prolonged Toxicity**

LC50, rainbow trout (*Oncorhynchus mykiss*), 96 h: 61-110 mg/l

LC50, fathead minnow (*Pimephales promelas*), 96 h: 93 - 115 mg/l

LC50, clawed toad (*Xenopus laevis*), 96 h: 32.7 - 36 mg/l

##### **Aquatic Invertebrate Acute Toxicity**

EC50, water flea (*Daphnia magna*), 48 h, immobilization: 58 – 108 mg/l

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## 12. ECOLOGICAL INFORMATION - continued

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### Solvent refined heavy paraffinic distillate (petroleum)

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in the most sensitive species tested).

#### **Fish Acute & Prolonged Toxicity**

LC50, rainbow trout (*Oncorhynchus mykiss*), 96 h: >1,000 mg/l

#### **Aquatic Invertebrate Acute Toxicity**

EC50, water flea (*Daphnia magna*), 48 h, immobilization: >1,000 mg/l

#### **Aquatic Plant Toxicity**

EC50, green alga (*Selenastrum capricornutum*), biomass growth inhibition, 96 h: >1,000 mg/l

### Petroleum distillates, solvent-dewaxed, heavy paraffinic

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in the most sensitive species tested).

#### **Fish Acute & Prolonged Toxicity**

LC50, rainbow trout (*Oncorhynchus mykiss*), 96 h: >1,000 mg/l

#### **Aquatic Invertebrate Acute Toxicity**

EC50, water flea (*Daphnia magna*), 48 h, immobilization: >1,000 mg/l

#### **Aquatic Plant Toxicity**

EC50, green alga (*Selenastrum capricornutum*), biomass growth inhibition, 96 h: >1,000 mg/l

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## 13. DISPOSAL CONSIDERATION

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If wastes and/or containers cannot be disposed of according to the product label directions, disposal of the 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 the 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 Classification**

Not regulated

### **IMDG Classification**

Not regulated

### **IATA Classification**

Not regulated

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## 15. REGULATORY INFORMATION

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### **SARA Title III Classification Sections 311 and 312**

Immediate (acute) health hazard Yes

Delayed (chronic) health hazard No

**Section 313 chemical(s):** 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 Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:**

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Component	CAS No.	Amount
Solvent refined heavy paraffinic distillate (petroleum)	64741-88-4	≥0.3 - ≤10.5%
Paraffinic distillate	64742-65-0	≥19.5 - ≤29.7%

### **Proposition 65**

Not applicable

### **CERCLA Reportable Quantity (RQ)**

Not applicable

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**15. REGULATORY INFORMATION - continued**

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**RCRA Classification**

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

**TSCA Status**

Exempt from TSCA

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**16. OTHER INFORMATION**

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**NFPA Hazard Ratings**

**Health:** 2  
**Flammability:** 1  
**Reactivity:** 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

**Prepared By:**

Gowan Company  
(800) 883-1844

**Notice:** The information and recommendations contained herein are provided in good faith and 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 herein.

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Conforms to HazCom 2012/United States

SDS

Renovate® 3

# SAFETY DATA SHEET



## Renovate® 3

### Herbicide

## Section 1. Identification

**GHS product identifier** : Renovate® 3 Herbicide

**Recommended use of the chemical and restrictions on use Identified uses** : Herbicide

**Supplier's details** : SePRO Corporation  
11550 North Meridian Street  
Suite 600  
Carmel, IN 46032 U.S.A.  
Tel: 317-580-8282  
Toll free: 1-800-419-7779  
Fax: 317-580-8290  
Monday - Friday, 8am to 5pm E.S.T.  
[www.sepro.com](http://www.sepro.com)

**Emergency telephone number (with hours of operation)** : INFOTRAC - 24-hour service 1-800-535-5053

The following recommendations for exposure controls and personal protection are intended for the manufacture, formulation and packaging of this product. For applications and/or use, consult the product label. The label directions supersede the text of this Safety Data Sheet for application and/or use.

## Section 2. Hazards identification

**Hazard classification** This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

- Flammable liquids - Category 3
- Eye irritation - Category 2A
- Specific target organ toxicity - single exposure - Category 3

**Label elements**  
**Hazard pictograms**



**Signal word:** **WARNING!**



**Hazards**

Flammable liquid and vapor.  
Causes serious eye irritation.  
May cause respiratory irritation.

**Precautionary statements**

**Prevention**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/ eye protection/ face protection.

**Response**

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/ attention.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage**

Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

**Disposal**

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

**Other hazards**

No data available

**Section 3. Composition/information on ingredients**

This product is a mixture.

Component	CASRN	Concentration
Triclopyr Triethylamine Salt	57213-69	44.4%
Triethylamine	121-44-8	3.0%
Alkylphenol alkoxyate	69029-39-6	1.0%
Balance	Not Available	47.2%

**Section 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.





## SDS

Renovate® 3

- Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- 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 immediately available.
- 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.

## Section 5. Fire-fighting measures

**Suitable extinguishing media:** To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Straight or direct water streams may not be effective to extinguish fire. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function.

**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.

**Unusual Fire and Explosion Hazards:**

This material will not burn until the water has evaporated. Residue can burn. May produce flash fire. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. If exposed to fire from another source and water is evaporated, exposure to high temperatures may cause toxic fumes.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Eliminate ignition sources. 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 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.

## Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep personnel out of low areas. No smoking in area. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Vapor explosion hazard. Keep out of sewers. 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.

**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 SePRO Corporation for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

## Section 7. Handling and storage

**Precautions for safe handling:** Keep out of reach of children. Keep away from heat, sparks and flame. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Electrically ground and bond all equipment. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Do not swallow. Wash thoroughly after handling. Use with adequate ventilation. No smoking, open flames or sources of ignition in handling and storage area. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Use of non-sparking or explosion -proof equipment may be necessary, depending upon the type of operation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

**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. Minimize sources of ignition, such as static build-up, heat, spark or flame.

**Section 8. Exposure controls/personal protection**

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/m3
	Dow IHG	TWA	SKIN, DSEN, BEI
Triethylamine	ACGIH	TWA	0.5 ppm
	ACGIH	STEL	1 ppm
	ACGIH	TWA	Absorbed via skin
	ACGIH	STEL	Absorbed via skin
	OSHA Z-1	TWA	100 mg/m3 25 ppm
Ethanol	ACGIH	TWA	1,000 ppm
	ACGIH	STEL	1,000 ppm
	OSHA Z-1	TWA	1,900 mg/m3 1,000 ppm
Alkylphenol alkoxylate	Dow IHG	TWA	2 mg/m3

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 when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). 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:** Wear clean, body-covering clothing.

**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.

## Section 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical State</b>	Liquid
<b>Color</b>	Pink
<b>Odor</b>	Ammoniacal
<b>Odor Threshold</b>	No test data available
<b>pH</b>	9.5 10% <i>pH Electrode</i>
<b>Melting point/range</b>	Not applicable
<b>Freezing point</b>	No test data available
<b>Boiling point (760 mmHg)</b>	No test data available
<b>Flash point</b>	Closed cup > 43 °C (>109 °F) <i>Setaflash Closed Cup ASTM D3828</i>
<b>Evaporation Rate (Butyl Acetate =1)</b>	No test data available
<b>Flammability (solid, gas)</b>	Not data available
<b>Lower explosion limit</b>	No test data available
<b>Upper lower explosion limit</b>	No test data available
<b>Vapor pressure</b>	Not applicable
<b>Relative Vapor Density (air = 1)</b>	Not applicable
<b>Relative Density (water = 1)</b>	1.1385 at 20 °C (68 °F) <i>Digital Density Meter (Oscillating Coil)</i>
<b>Water solubility</b>	Soluble
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No test data available
<b>Decomposition temperature</b>	No test data available
<b>Dynamic Viscosity</b>	12.5 mPa.s at 25 °C (77 °F)
<b>Kinematic Viscosity</b>	No test data available
<b>Explosive properties</b>	No <i>Thermal</i>
<b>Oxidizing properties</b>	No
<b>Liquid Density</b>	1.1385 g/cm <sup>3</sup> at 20 °C (68 °F) <i>Digital density meter</i>
<b>Molecular weight</b>	No data available
<b>Surface tension</b>	38.5 mN/m at 20 °C (68 °F) <i>EC Method A5</i>

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

## Section 10. Stability and reactivity

<b>Reactivity:</b>	No data available
<b>Chemical stability:</b>	Thermally stable at recommended temperatures and pressures.
<b>Possibility of hazardous reactions:</b>	Polymerization will not occur.
<b>Conditions to avoid:</b>	Active ingredient decomposes at elevated temperatures.
<b>Incompatible materials:</b>	Avoid contact with: Oxidizers
<b>Hazardous decomposition products:</b>	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.

## Section 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.

As product: LD50, Rat, female, 4100 mg/kg

**Acute dermal toxicity**

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

As product: LD50, Rabbit, male and female, > 5,000 mg/kg

**Acute inhalation toxicity**

No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

As product: LC50, Rat, male and female, 4 Hour, Mist, > 5.4 mg/1

Maximum attainable concentration.

No deaths occurred at this concentration.

**Skin corrosion/irritation**

Brief contact is essentially nonirritating to skin.

**Serious eye damage/  
eye irritation**

May cause moderate eye irritation.

May cause moderate corneal injury.

**Sensitization**

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization: No relevant data found.

**Specific Target Organ  
Systemic Toxicity  
(Single Exposure)**

May cause respiratory irritation.

**Specific Target Organ  
Systemic Toxicity  
(Repeated Exposure)**

For the active ingredient(s): In animals, effects have been reported on the following organs:  
Kidney.

For the minor component(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 similar active ingredient(s). Triclopyr. Did not cause cancer in laboratory animals.

**Teratogenicity**

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.

For the minor component(s): Has caused birth defects in lab animals at high doses. EDTA and its sodium salts have been reported to cause birth defects in laboratory animals only at exaggerated doses that were toxic to the mother. These effects are likely associated with zinc deficiency due to chelation.

**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.

**Mutagenicity**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Aspiration Hazard**

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

## Section 12. Ecological information

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

<b>Toxicity</b>	
<b>Acute toxicity to fish</b>	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, <i>Oncorhynchus mykiss</i> (rainbow trout), 96 Hour, 400 mg/L  LC50, <i>Lepomis macrochirus</i> (Bluegill sunfish), semi-static test, 96 Hour, > 100 mg/L
<b>Acute toxicity to aquatic Invertebrates</b>	EC50, eastern oyster ( <i>Crassostrea virginica</i> ), static test, 48 Hour, 56 - 87 mg/L LC50, <i>Daphnia magna</i> (Water flea), static test, 48 Hour, > 1,000 mg/L
<b>Acute toxicity to algae/aquatic plants</b>	ErC50, <i>Pseudokirchneriella subcapitata</i> (green algae), 72hr Growth rate inhibition, 107 mg/L  ErC50, blue-green alga <i>Anabaena flos-aquae</i> , 72 Hour, Growth inhibition, > 100 mg/L  EC50, <i>Lemna gibba</i> , 7 d, Growth inhibition, > 100 mg/L
<b>Persistence and degradability</b>	
<b>Triclopyr Triethylamine Salt</b>	
<b>Biodegradability:</b>	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.
<b>Triethylamine</b>	
<b>Biodegradability:</b>	Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability). 10-day Window: Pass
<b>Biodegradation:</b>	96%
<b>Exposure time:</b>	21 d
<b>Method:</b>	OECD Test Guideline 301 A or Equivalent 10-day Window: Not applicable
<b>Biodegradation:</b>	25-34%
<b>Exposure time:</b>	28 d
<b>Method:</b>	OECD Test Guideline 302C or Equivalent
<b>Theoretical Oxygen Demand:</b>	3.49 mg/mg
<b>Photodegradation</b>	<b>Test Type:</b> Half-life (indirect photolysis) <b>Sensitizer:</b> OH radicals <b>Atmospheric half-life:</b> 0.116 d <b>Method:</b> Estimated.

**Ethylenediamine tetraacetic acid**

<b>Biodegradability:</b>	Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability). 10-day Window: Not applicable
<b>Biodegradation:</b>	37%
<b>Exposure time:</b>	14 d
<b>Method:</b>	OECD Test Guideline 3028 or Equivalent 10-day Window: Fail
<b>Biodegradation:</b>	0%
<b>Exposure time:</b>	30 d
<b>Method:</b>	OECD Test Guideline 3010 or Equivalent
<b>Theoretical Oxygen Demand:</b>	1.37 mg/mg
<b>Photodegradation</b>	<b>Test Type:</b> Half-life (indirect photolysis) <b>Sensitizer:</b> OH radicals <b>Atmospheric half-life:</b> 2.12 Hour <b>Method:</b> Estimated.

**Ethanol**

<b>Biodegradability:</b>	Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. 10-day Window: Pass
<b>Biodegradation:</b>	> 70%
<b>Exposure time:</b>	5 d
<b>Method:</b>	OECD Test Guideline 3010 or Equivalent
<b>Theoretical Oxygen Demand:</b>	2.08 mg/mg
<b>Photodegradation</b>	<b>Test Type:</b> Half-life (indirect photolysis) <b>Sensitizer:</b> OH radicals <b>Atmospheric half-life:</b> 2.99 d <b>Method:</b> Estimated.

**Alkylphenol alkoxyate**

<b>Biodegradability:</b>	Biodegradation under aerobic laboratory conditions is below detectable limits (80020 or 80028/ThOD < 2.5%).
<b>Theoretical Oxygen Demand:</b>	2.35 mg/mg
<b>Chemical Oxygen Demand:</b>	1.78 mg/mg

**Balance**

**Biodegradability:** No relevant data found.

**Bioaccumulative potential**

**Bioaccumulation:** No data available for this product.

**Mobility in soil****Triclopyr Triethylamine Salt**

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



## SDS

Renovate® 3

Triethylamine

Potential for mobility in soil is very high (Koc between 0 and 50).  
**Partition coefficient(Koc):** 11 - 146 Estimated.

Ethylenediamine tetra  
acetic acid

Potential for mobility in soil is high (Koc between 50 and 150).  
**Partition coefficient(Koc):** 98

Ethanol

Potential for mobility in soil is very high (Koc between 0 and 50).  
**Partition coefficient(Koc):** 1.0 Estimated.

Alkylphenol alkoxyate

No data available.

Balance

No relevant data found.

### Section 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.

### Section 14. Transport information

DOT

**Proper shipping name** Combustible liquid, n.o.s. (Triethylamine, Ethanol)  
**UN Number** NA 1993  
**Class** CBL  
**Packing Group** III

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

**Proper shipping name** FLAMMABLE LIQUID, N.O.S. (Triethylamine, Ethanol)  
**UN number** UN 1993  
**Class** 3  
**Packing group** III  
**Marine pollutant** No  
**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

**Classification for AIR transport (IATAJICAO):**

**Proper shipping name** Flammable liquid, n.o.s.(Triethylamine, Ethanol)  
**UN number** UN 1993  
**Class** 3  
**Packing group** 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.

**Section 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**

Fire Hazard  
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	CASRN
Triethylamine	121-44-8
Triclopyr Triethylamine Salt	57213-69-1

**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.

**Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:**

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Components	CASRN
Triethylamine	121-44-8
Ethylenediamine tetraacetic acid	60-00-4
Ethanol	64-1 7-5



**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: 62719-37-67690  
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 absorbed through skin  
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**Section 16. Other information**

**Hazard Rating System NFPA**

Health: 2      Fire: 2      Reactivity: 0

**Legend**

- Absorbed via skin      Absorbed via skin
- ACGIH      USA. ACGIH Threshold Limit Values (TLV)
- DOW IHG      Dow Industrial Hygiene Guideline
- OSHA Z-1      USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants
- SKIN, SDEN, BEI      Absorbed via Skin, Skin Sensitizer, Biological Exposure Indices
- STEL      Short-term exposure limit
- TWA      8-hour, time-weighted average

**History**

**Date of issue mm/dd/yyyy:**    08/11/2015

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC@:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL SDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: **AB SHORE-KLEAR**

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Supplier</b> Applied Biochemists (WI) W175 N11163 Stonewood Drive , Suite 234 Germantown, WI, 53022 USA	REVISION DATE: 05/26/2015 SUPERCEDES: 10/06/2006
Telephone: +12622554449 Telefax: +12622554449 Web: www.appliedbiochemists.com	MSDS Number: 000000024518 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

**Manufacturer**  
Advantis Technologies  
1200 Bluegrass Lakes Parkway  
Alpharetta, GA 30004  
United States of America

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Acute toxicity (Inhalation) : Category 4

### GHS Label element

Hazard pictograms :



Signal word : Warning

Hazard statements : H332 Harmful if inhaled.

Precautionary statements : **Prevention:**  
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
 P271 Use only outdoors or in a well-ventilated area.  
**Response:**  
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
**Storage:**  
 P402 + P404 Store in a dry place. Store in a closed container.  
 P410 + P403 Protect from sunlight. Store in a well-ventilated place.  
**Disposal:**  
 P501 Dispose of contents/container in accordance with local regulation.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Unknown	38641-94-0	50 - 56

**SECTION 4. FIRST AID MEASURES**

General Advice: Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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 a poison control center or doctor for further 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 a poison control center or doctor for treatment advice.

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 the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Ingestion: IF SWALLOWED: 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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## SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA):	Product is not known to be flammable, combustible, pyrophoric or explosive.
<u>Flammable Properties</u>	
Flash Point:	Not applicable
Fire / Explosion Hazards:	Material will not ignite or burn. Reacts with most metals to form flammable hydrogen gas.
Extinguishing Media:	Water Foam Dry powder Carbon dioxide (CO <sub>2</sub> )
Fire Fighting Instructions:	Use water spray to cool unopened containers. In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.
Hazardous Combustion Products:	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.
<u>Spill Mitigation Procedures</u>	
Air Release:	Keep people away from and upwind of spill/leak.
Water Release:	This material is soluble in water. If the product contaminates rivers and lakes or drains inform respective authorities.
Land Release:	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not contaminate ponds, waterways or ditches with chemical or used container.
Additional Spill Information :	Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

## SECTION 7. HANDLING AND STORAGE

Handling:	Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid breathing mist or vapor. Wash thoroughly after handling. Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum<(>,<)> fiberglass, plastic or plastic-lined containers. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode<(>,<)> causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.
Storage:	Keep in a dry, cool and well-ventilated place. Avoid freezing. STORE ABOVE 10°F (-12°C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room 68°F (20°C) for several days to redissolve and shake, roll or agitate to mix well before using. Do not contaminate water, foodstuff, feed or seed by storage or disposal.
Incompatible Materials for Storage:	Refer to Section 10, "Incompatible Materials."

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: No exposure limits exist for the constituents of this product. Additional ventilation beyond that of general exhaust is not normally required.

### Protective Equipment for Routine Use of Product

Respiratory Protection :	Respiratory protection not normally needed., If vapors, mists or aerosols are generated, wear a NIOSH approved respirator., Wear a NIOSH approved N95 respirator.
Skin Protection :	Impervious gloves
Eye Protection:	Safety glasses with side-shields
Protective Clothing Type:	impervious clothing, Butyl rubber, Natural rubber, Neoprene, Nitrile

### **Components with workplace control parameters**

no data available

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	No data.
Color:	No data.
Odor:	No data.

Molecular Weight:	None established
pH :	4.82 ( ) 10 g/l (as aqueous solution)
Boiling Point:	no data available
Melting point/freezing point	No data
Density	no data available
Bulk Density:	1,210 kg/m3 ( )
Vapor Pressure:	no data available
Vapor Density:	no data available
Viscosity:	67.9 mPa.s 20 °C no data available
Solubility in Water:	soluble in cold water
Partition coefficient n-octanol/water:	No data
Evaporation Rate:	no data available
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489). This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.
HAP Content	No data

## SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat, Avoid freezing.
Chemical Incompatibility:	Strong oxidizing agents, Acids, Bases, Metals, This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.
Hazardous Decomposition Products:	Carbon oxides, Nitrogen oxides (NOx), phosphorus oxides, Hydrogen, by reaction with metals
Decomposition Temperature:	No data

## SECTION 11. TOXICOLOGICAL INFORMATION

### Product Animal Toxicity

<u>Oral LD50 value:</u>	LD50	Believed to be > 5,000 mg/kg	Rat
<u>Dermal LD50 value:</u>	LD50	Believed to be > 5,000 mg/kg	Rabbit
<u>Inhalation LC50 value:</u>	LC50 4 h (aerosol)	Believed to be > 4.24 mg/l	Rat LC50 1 h (aerosol)
		Believed to be > 16.96 mg/l	Rat

Skin Irritation: Not expected to cause irritation.

Eye Irritation:	Not expected to cause irritation.
Skin Sensitization:	This material is not known or reported to be a skin or respiratory sensitizer. The active ingredient in this product tested negative for skin sensitization in laboratory animals.
Acute Toxicity:	There are no known or reported target organ effects from acute exposure.
Subchronic / Chronic Toxicity:	Not known or reported to cause subchronic or chronic toxicity.
Reproductive and Developmental Toxicity:	No reproductive or developmental risk to humans is expected from exposure to this product. The active ingredient in this product has been tested in laboratory animals and no evidence of teratogenicity or reproductive toxicity was seen.
Mutagenicity:	Not known or reported to be mutagenic. The active ingredient in this product has been tested in a battery of mutagenicity assays and was found to be non-mutagenic under the conditions of the tests.
Carcinogenicity:	This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. The carcinogenicity of the active ingredient in this product has been evaluated through animal study and it was found not to be carcinogenic.

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## SECTION 12. ECOLOGICAL INFORMATION

Overview: Practically non- toxic to fish and other aquatic organisms.

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## SECTION 13. DISPOSAL CONSIDERATIONS

**CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.**

Waste Disposal Summary : If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

Disposal Methods : As a nonhazardous waste, it should be disposed of in accordance with local, state and federal regulations.



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## SECTION 14. TRANSPORT INFORMATION

**DOT**

Not dangerous goods

**TDG**

Not dangerous goods

**IATA**

Not dangerous goods

**IMDG-CODE**

Not dangerous goods

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## SECTION 15. REGULATORY INFORMATION

**This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals.**

Signal word : CAUTION!  
Hazard statements : Harmful if inhaled.

**EPCRA - Emergency Planning and Community Right-to-Know Act****SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

#### Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

#### US State Regulations

##### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

##### Pennsylvania Right To Know

No components are subject to the Pennsylvania Right to know act

##### New Jersey Right To Know

No components are subject to the New Jersey Right to know act

##### California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### The components of this product are reported in the following inventories:

TSCA : This is an EPA registered pesticide.  
: Nufarm Aquaneat

#### Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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## SECTION 16. OTHER INFORMATION

SECTIONS REVISED: First formulated version in SAP.  
Major References : Available upon request.

AB SHORE-KLEAR

REVISION DATE : 05/26/2015

Page 8 of 9

## SAFETY DATA SHEET

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .