



**BARRICADE SG**

Version 1.0

Revision Date 03/01/2018

Ref. 130000139548

This SDS adheres to the standards and regulatory requirements of Canada and may not meet the regulatory requirements in other countries.

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : BARRICADE SG  
Tradename/Synonym : THIFENSULFURON METHYL (Methyl 3-[[[(4-methoxy-6-methyl-1,3,5- triazin-2-yl)amino]carbonyl]amino] sulfonyl]-2-thiophenecarboxylate)  
TRIBENURON METHYL (Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin- 2-yl)methylamino]carbonyl]- amino]sulfonyl] benzoate)

Product Use : Herbicide

Restrictions on use : Do not use product for anything outside of the above specified uses.  
Manufacturer : FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

Medical Emergency : 1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)  
1 651 / 632-6793 (ProPharma Group - All Other Countries - Collect)  
For leak, fire, spill or accident emergencies, call:  
1 800 / 424 9300 (CHEMTREC - U.S.A.)  
1 703 / 741-5970 (CHEMTREC - International)  
1 703 / 527 3887 (CHEMTREC - Alternate)

**SECTION 2. HAZARDS IDENTIFICATION**

**Product hazard category**  
Skin sensitisation Category 1B

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**Label content**

Pictogram

:



Signal word

: Warning

Hazardous warnings

: May cause an allergic skin reaction.

Hazardous prevention  
measures

: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves.  
IF ON SKIN: Wash with plenty of water.  
If skin irritation or rash occurs: Get medical advice/ attention.  
Take off contaminated clothing and wash it before reuse.  
Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

Information presented in Section 2 conforms to the requirements of the Hazardous Products Regulations (HPR) and WHMIS 2015. See Section 15 for applicable information conforming to the requirements of the Pest Management Regulatory Agency (PMRA).

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

Component	CAS-No.	Concentration (% w/w)
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Tribenuron methyl	101200-48-0	25%
Thifensulfuron methyl	79277-27-3	25%
Sodium carbonate	497-19-8	10 - 15%
Trisodium phosphate dodecahydrate	10101-89-0	10 - 15%
Other Ingredients		20 - 30%

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

### SECTION 4. FIRST AID MEASURES

- General advice : Have the product container or label with you when calling a poison control center or doctor, or going for treatment.  
See Section 1 for emergency phone numbers.  
See Label for Additional Precautions and Directions for Use.  
Information presented in Section 4 conforms to the requirements of the Hazardous Products Regulations (HPR) and WHMIS 2015. See Section 15 for applicable information conforming to the requirements of the Pest Management Regulatory Agency (PMRA).
- Inhalation : Move 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 treatment advice.
- Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Eye contact : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- Ingestion : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- Most important symptoms/effects, acute and delayed : No applicable data available.
- Protection of first-aiders : No applicable data available.
- Notes to physician : No applicable data available.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray, Dry chemical, Foam, Carbon dioxide (CO<sub>2</sub>)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Specific hazards : No applicable data available.
- Special protective equipment for firefighters : Wear full protective equipment.
- Further information : (on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with water spray.  
Do not allow run-off from fire fighting to enter drains or water courses.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Safeguards (Personnel) : Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Use personal protective equipment.
- Environmental precautions : Prevent material from entering sewers, waterways, or low areas.
- Spill Cleanup : Shovel or sweep up. Avoid dust formation. Dispose of in an approved container.
- Accidental Release Measures : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

**SECTION 7. HANDLING AND STORAGE**

- Handling (Personnel) : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition. Under severe dusting

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conditions, this material may form explosive mixtures in air.

Dust explosion class	: No applicable data available.
Storage	: Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Store in a cool, dry place. Keep out of the reach of children.
Storage period	: No applicable data available.
Storage temperature	: < 35 °C (< 95 °F)

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	: Information presented in Section 8 conforms to the requirements of the Hazardous Products Regulations (HPR) and WHMIS 2015. See Section 15 for applicable information conforming to the requirements of the Pest Management Regulatory Agency (PMRA).
Personal protective equipment	
Skin and body protection	: Applicators and other handlers must wear: Long sleeved shirt and long pants Chemical-resistant gloves, Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all greater than or equal to 14 mils Shoes plus socks PPE required for early entry to treated areas that is permitted in accordance with Provincial and Territorial management programs, and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls Chemical resistant gloves made of any waterproof material Shoes plus socks
Protective measures	: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated.
Exposure Guidelines	
Exposure Limit Values	
	No data available

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

## Appearance

Physical state : solid  
Form : solid, granular  
Color : light brown

Odor : slight

Odor threshold : not determined

pH : 8.6 - 9.4

Melting point/freezing point : Melting point/range  
Not available for this mixture.

Boiling point/boiling range : Boiling point/boiling range  
Not applicable

Flash point : No applicable data available.

Evaporation rate : No applicable data available.

Flammability (solid, gas) : Does not sustain combustion.

Upper explosion limit : No applicable data available.

Lower explosion limit : 0.1 - 0.23 g/l

Vapor pressure : Not available for this mixture.

Vapor density : Not available for this mixture.

Density : at 22 °C (72 °F)

Specific gravity (Relative density) : No applicable data available.

Water solubility : soluble

Solubility(ies) : No applicable data available.

Partition coefficient: n-octanol/water : Not applicable

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Auto-ignition temperature	:	387 °C
Decomposition temperature	:	No applicable data available.
Viscosity, kinematic	:	No applicable data available.
Viscosity, dynamic	:	Not applicable
Phys-chem data	:	No other data to be specially mentioned.
Oxidizing Substance	:	The product is not oxidizing.

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	:	No hazards to be specially mentioned.
Chemical stability	:	The product is chemically stable under recommended conditions of storage, use and temperature. Stable at normal temperatures and storage conditions.
Possibility of hazardous reactions	:	No applicable data available.
Conditions to avoid	:	No applicable data available.
Incompatible materials	:	No materials to be especially mentioned.
Hazardous decomposition products	:	Hazardous combustion products: Carbon dioxide (CO <sub>2</sub> ), Nitrogen oxides (NO <sub>x</sub> )

**SECTION 11. TOXICOLOGICAL INFORMATION****BARRICADE SG**

Inhalation 4 h Acute toxicity estimate	:	> 5 mg/l , Rat
Dermal Acute toxicity estimate	:	> 5,000 mg/kg , Rat
Oral Acute toxicity estimate	:	> 5,000 mg/kg , Rat
Skin irritation	:	No skin irritation, Rat
Eye irritation	:	No eye irritation, Rabbit
Sensitisation	:	The product is a skin sensitiser, sub-category 1B., Guinea pig
Further information	:	Information given is based on data on the components and the toxicology of similar products.



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Further information : Information presented in section 11 conforms to the requirements of the Hazardous Products Regulations (HPR) and WHMIS 2015. See Section 15 for applicable information conforming to the requirements of the Pest Management Regulatory Agency (PMRA).

Tribenuron methyl

Repeated dose toxicity

: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Oral - feed

Mouse

- 90 d

NOAEL: 500 mg/kg

Reduced body weight gain

Oral

Rat

- 28 d

Reduced body weight gain

Carcinogenicity

: Not classifiable as a human carcinogen.  
An increased incidence of tumours was observed in laboratory animals.  
Target(s):  
Mammary glands

Mutagenicity

: Animal testing did not show any mutagenic effects.  
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Reproductive toxicity

: No toxicity to reproduction

Thifensulfuron methyl

Repeated dose toxicity

: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Oral - feed

multiple species

-

Reduced body weight gain

Carcinogenicity

: Animal testing did not show any carcinogenic effects.

Mutagenicity

: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

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Animal testing did not show any mutagenic effects.

Reproductive toxicity : No toxicity to reproduction  
Animal testing showed no reproductive toxicity.

Teratogenicity : Did not show teratogenic effects in animal experiments.  
Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

### Sodium carbonate

Repeated dose toxicity : Inhalation  
Rat  
-  
Respiratory tract irritation

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.  
Evidence suggests this substance does not cause genetic damage in animals.

Reproductive toxicity : Animal testing showed no reproductive toxicity.

Teratogenicity : Animal testing showed no developmental toxicity.

### Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to Hazardous Products Regulation (HPR), Subpart 6, 8.6.1. The classifications may differ from those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC as a carcinogen.

## SECTION 12. ECOLOGICAL INFORMATION

### Aquatic Toxicity

#### Tribenuron methyl

96 h LC50 : Oncorhynchus mykiss (rainbow trout) 738 mg/l

120 h EC50 : Pseudokirchneriella subcapitata (microalgae) 0.11 mg/l

14 d EC50 : Lemna gibba (duckweed) 0.00425 mg/l

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48 h EC50	:	Daphnia magna (Water flea) > 894 mg/l
Thifensulfuron methyl		
96 h LC50	:	Oncorhynchus mykiss (rainbow trout) > 100 mg/l
14 d EC50	:	Lemna minor (duckweed) 0.0013 mg/l
48 h EC50	:	Daphnia magna (Water flea) 470 mg/l
28 d	:	NOEC Americamysis bahia (mysid shrimp) 7.93 mg/l
Sodium carbonate		
96 h LC50	:	Lepomis macrochirus (Bluegill sunfish) 300 mg/l
48 h LC50	:	Ceriodaphnia dubia (water flea) 200 - 227 mg/l
4 d	:	EC50 Daphnia magna (Water flea) 228 - 297 mg/l
Trisodium phosphate dodecahydrate		
96 h EC50	:	Gambusia affinis (Mosquito fish) 151 mg/l
96 h EC50	:	Daphnia magna (Water flea) 126 mg/l
Environmental Fate		
Sodium carbonate		
Biodegradability	:	The methods for determining biodegradability are not applicable to inorganic substances.
Bioaccumulation	:	Does not bioaccumulate.
Additional ecological information	:	Environmental Hazards: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

### SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product : Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Waste disposal methods - : Container Refilling and Disposal:

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Container Refer to the product label for instructions.  
The container must only be refilled with this pesticide product.  
**DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.**  
Do not transport if this container is damaged or leaking.

In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

Contaminated packaging : No applicable data available.

### SECTION 14. TRANSPORT INFORMATION

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Tribenuron methyl, Thifensulfuron-methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tribenuron methyl, Thifensulfuron-methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9
	Marine pollutant	: yes (Tribenuron methyl, Thifensulfuron-methyl)

Not regulated as a hazardous material by DOT.

Not regulated as a hazardous material by TDG.

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA special provision A197, and ADR/RID special provision 375.

### SECTION 15. REGULATORY INFORMATION

PCP Registration # : 29544

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Other regulations : The approved pest control product label (the label), under the Pest Control Products Act, needs to be followed at all times and in cases where there are any discrepancies between the approved label and an SDS for that product it is the label information that prevails.

This Safety Data Sheet is for a pesticide product registered by the Pest Management Regulatory Agency (PMRA), and is therefore also subject to certain requirements under Canadian pesticide laws, including the Pest Control Products Act (PCPA). These requirements differ from the classification criteria and hazard information required by the Hazardous Product Regulations (HPR) and WHMIS 2015 for safety data sheets, and for workplace labels of non-pesticide chemicals. The following information is determined by PMRA.

May cause sensitisation by skin contact. Avoid breathing spray mist. May be harmful if swallowed, in contact with skin or if inhaled. Causes eye and skin irritation.

**SECTION 16. OTHER INFORMATION**

MSDS preparation date : 03/01/2018

® Registered trademark of FMC Corporation

Contact person : FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

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Significant change from previous version is denoted with a double bar.

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# Material Safety Data Sheet

Issue Date: 03/01/2018

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## 1. PRODUCT AND COMPANY IDENTIFICATION

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Product name: **Perimeter II Herbicide**

**Recommended use of the chemical and restrictions on use**

**Identified uses:** End use herbicide product

**COMPANY IDENTIFICATION**

FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (General Information)

**Medical Emergency:**

1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)  
1 651 / 632-6793 (ProPharma Group - All Other Countries - Collect)

**For leak, fire, spill or accident emergencies, call:**

1 800 / 424 9300 (CHEMTREC - U.S.A.)  
1 703 / 741-5970 (CHEMTREC - International)  
1 703 / 527 3887 (CHEMTREC - Alternate)

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## 2. HAZARDS IDENTIFICATION

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**Emergency Overview**

**Appearance**

Physical state            Liquid

Color                      Yellow

**Odor**                      Spicy

**Hazard Summary**

**WARNING!!**

May cause allergic skin reaction.

May cause eye irritation.

Isolate area.

Toxic fumes may be released in fire situations.

### Potential Health Effects

**Eyes:** May cause moderate eye irritation.  
May cause slight corneal injury.

**Skin:** Has demonstrated the potential for contact allergy in mice.  
Prolonged skin contact is unlikely to result in absorption of harmful amounts.  
Brief contact may cause slight skin irritation with local redness.  
May cause drying and flaking of the skin.

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

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

**Chronic Exposure:** For the active ingredient(s):  
Has been toxic to the fetus in laboratory animals at doses toxic to the mother.  
Based on information for component(s):  
In animals, effects have been reported on the following organs:  
Kidney.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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This product is a mixture.

Component	CASRN	Weight percent
Fluroxypyr 1-methylheptyl ester	81406-37-3	45.52%
Heavy aromatic naphtha	64742-94-5	>= 0.7 - <= 2.6 %
N-Methyl-2-pyrrolidone	872-50-4	0.1%
Balance	Not available	>= 51.8 - <= 53.7 %

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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:** No emergency medical treatment necessary.

**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. Skin contact may aggravate preexisting dermatitis.

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## 5. FIREFIGHTING MEASURES

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**Suitable 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.

**Unsuitable extinguishing media:** Do not use direct water stream. May spread fire.

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

**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: Nitrogen oxides. Hydrogen fluoride. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environment damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing 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 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.

**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. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. 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 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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### Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Fluroxypyr 1-methylheptyl ester	Dow IHG	TWA	10 mg/m <sup>3</sup>
N-Methyl-2-pyrrolidone	US WEEL	TWA	10 ppm
	US WEEL	TWA	Absorbed via skin
	CA ON OEL	TWA	400 mg/m <sup>3</sup>
	US WEEL	TWA	Absorbed via skin

Consult local authorities for recommended exposure limits.

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**

<b>Physical state</b>	Liquid
<b>Color</b>	Yellow
<b>Odor</b>	Spicy
<b>Odor Threshold</b>	No test data available
<b>pH</b>	4.58 1% ASTM E70
<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>	<b>closed cup</b> > 100 °C ASTM D3278
<b>Evaporation Rate (Butyl Acetate = 1)</b>	No test data available
<b>Flammability (solid, gas)</b>	Not applicable to liquids
<b>Lower explosion limit</b>	No test data available
<b>Upper explosion limit</b>	No test data available
<b>Vapor Pressure</b>	No test data available
<b>Relative Vapor Density (air = 1)</b>	No test data available
<b>Relative Density (water = 1)</b>	1.05

<b>Water solubility</b>	emulsifiable
<b>Partition coefficient: n-octanol/water</b>	no data available
<b>Auto-ignition temperature</b>	358 °C <i>EC Method A15</i>
<b>Decomposition temperature</b>	No test data available
<b>Dynamic Viscosity</b>	28.2 mPa.s at 40 °C <i>OECD 114</i>
<b>Kinematic Viscosity</b>	No test data available
<b>Explosive properties</b>	No <i>EEC A14</i>
<b>Oxidizing properties</b>	no data available
<b>Liquid Density</b>	1.05 g/cm <sup>3</sup> at 20 °C <i>OECD 109</i>
<b>Molecular weight</b>	No test data available
<b>Surface tension</b>	32 mN/m at 25 °C <i>EC Method A5</i>

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:** Unstable at elevated temperatures.

**Possibility of hazardous reactions:** Polymerization will not occur.

**Conditions to avoid:** Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.

**Incompatible materials:** None known.

**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. Hydrogen fluoride. Nitrogen oxides. Toxic gases are released during decomposition.

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## 11. TOXICOLOGICAL INFORMATION

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

### Acute toxicity

#### Acute oral toxicity

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

As product:

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

#### 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.

LC50, Rat, male and female, 4 Hour, dust/mist, > 5.50 mg/l

**Skin corrosion/irritation**

Brief contact may cause slight skin irritation with local redness.

May cause drying and flaking of the skin.

Prolonged contact is essentially nonirritating to skin.

**Serious eye damage/eye irritation**

May cause moderate eye irritation.

May cause slight corneal injury.

**Sensitization**

As product:

Has demonstrated the potential for contact allergy in mice.

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):

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

For the major component(s):

For similar material(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:

Lung.

Gastrointestinal tract.

Thyroid.

Urinary tract.

Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

**Carcinogenicity**

For similar active ingredient(s). Fluroxypyr-meptyl. 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): N-methyl pyrrolidone has caused toxic effects to the fetus in laboratory animals at high dose levels with either mild or undetectable maternal toxicity.

**Reproductive toxicity**

For the active ingredient(s): In animal studies, did not interfere with reproduction.

**Mutagenicity**

As product: 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.

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**12. ECOLOGICAL INFORMATION**

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

**Toxicity****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), flow-through test, 96 Hour, 14.3 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates**

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, 20 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants**

ErC50, *Pseudokirchneriella subcapitata* (green algae), static test, 72 Hour, Growth rate inhibition, 9.6 mg/l, OECD Test Guideline 201

**Toxicity to Above Ground Organisms**

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

oral LD50, *Colinus virginianus* (Bobwhite quail), > 2,250 mg/kg

**Toxicity to soil-dwelling organisms**

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

**Persistence and degradability****Fluroxypyr 1-methylheptyl ester**

**Biodegradability:** Material is not readily biodegradable according to OECD/EEC guidelines.

10-day Window: Fail

**Biodegradation:** 32 %

**Exposure time:** 28 d

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

**Theoretical Oxygen Demand:** 2.2 mg/mg

**Stability in Water (1/2-life)**

, half-life, 454 d

**Heavy aromatic naphtha**

**Biodegradability:** Material is not readily biodegradable according to OECD/EEC guidelines.

**N-Methyl-2-pyrrolidone**

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

10-day Window: Pass

**Biodegradation:** 91 %

**Exposure time:** 28 d

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

**Theoretical Oxygen Demand:** 2.58 mg/mg

**Photodegradation**

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

**Sensitizer:** OH radicals

**Atmospheric half-life:** 0.486 d

**Method:** Estimated.

**Balance**

**Biodegradability:** No relevant data found.

**Bioaccumulative potential****Fluroxypyr 1-methylheptyl ester**

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

**Partition coefficient: n-octanol/water(log Pow):** 5.04 Measured

**Bioconcentration factor (BCF):** 26 Oncorhynchus mykiss (rainbow trout) Measured

**Heavy aromatic naphtha**

**Bioaccumulation:** For similar material(s): Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

**N-Methyl-2-pyrrolidone**

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

**Partition coefficient: n-octanol/water(log Pow):** -0.38 Measured

**Balance**

**Bioaccumulation:** No relevant data found.

**Mobility in soil****Fluroxypyr 1-methylheptyl ester**

Expected to be relatively immobile in soil (Koc > 5000).

**Partition coefficient(Koc):** 6200 - 43000

**Heavy aromatic naphtha**

No relevant data found.

**N-Methyl-2-pyrrolidone**

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):** 21 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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TD ;

<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Fluroxypyr)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	Fluroxypyr

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

<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Fluroxypyr)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	Fluroxypyr
<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.(Fluroxypyr)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III

**Further information:**

### NOT REGULATED PER TDG EXEMPTION 1.45.1 FOR ROAD OR RAIL

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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**Hazardous Products Act Information: CPR Compliance**

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**Hazardous Products Act Information: WHMIS Classification**

This product is exempt under WHMIS.

**National Fire Code of Canada**

Not applicable

**Canadian Domestic Substances List (DSL) (DSL)**

This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements.

**Pest Control Products Act Registration Number: 30094**

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## 16. OTHER INFORMATION

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

Health	Fire	Reactivity
1	1	1

**Revision**

Identification Number: 101188173 / A215 / Issue Date: 03/01/2018 / Version: 5.3

DAS Code: GF-1784

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

**Legend**

Absorbed via skin	Absorbed via skin
CA ON OEL	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
Dow IHG	Dow Industrial Hygiene Guideline
TWA	8-hr TWA
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

**Information Source and References**

The information in this Safety Data Sheet is based entirely on information from FMC Corporation.

This SDS is prepared by the Global Regulatory Chemical Compliance team in the Global Regulatory Affairs Group from information supplied by internal references within our company.

**Disclaimer**

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## SAFETY DATA SHEET

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### SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

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**Product Name:** Albaugh MCPA Ester 600

**PCP Reg. No.:** 32311

**Product use:** Herbicide

**Supplier's name and address:**

Albaugh, LLC  
1525 NE 36<sup>th</sup> St.  
Ankeny, IA 50021  
1-800-247-8013

**Emergency Telephone #:**

1-800-424-9300 (CHEMTREC)

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### SECTION 2 — HAZARDS IDENTIFICATION

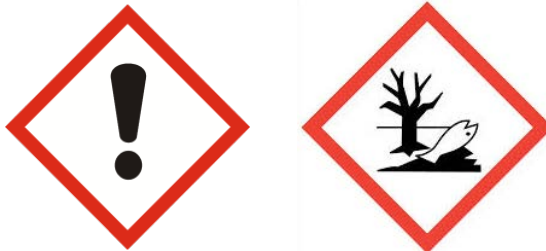
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**Physical Hazards:** None  
**Health Hazards:** Acute Toxicity (Oral) ..... Category 4  
Acute Toxicity (Inhalation) ..... Category 4  
Acute Toxicity (Dermal) ..... Category 5

**Environmental Hazards:** Hazardous to aquatic environment, acute - Category 1

**Signal Word:** WARNING

**Hazard Statements:** Harmful if swallowed. Harmful if inhaled. May be harmful in contact with skin. Very toxic to aquatic life.



**Precautionary Statements:** May be harmful in contact with skin. Avoid contact with skin, eyes and clothing. After use, wash hands and other exposed skin. Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Remove and wash contaminated clothing before reuse. Harmful if swallowed. Do not eat, drink or smoke when using this product. Avoid breathing spray mist. Use only outdoors or in a well-ventilated area. This product contains an active ingredient and petroleum distillates which are toxic to aquatic organisms.

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### SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

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Hazardous Component	CAS No.	Percentage (%)
MCPA 2-ethylhexyl ester	29450-45-1	55-58
Petroleum distillates (contains)	64742-47-8	2-3

Other ingredients are considered non-hazardous.

Content Listed on Product Label
MCPA, present as 2-ethylhexyl ester ..... 600 g a.e./L

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### SECTION 4 — FIRST AID MEASURES

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**If Swallowed:** call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person

**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.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**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 centre or doctor for treatment advice.

Take the container, label or product name and Pest Control Product Registration Number with you when calling a poison control center or doctor or going for treatment.

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### SECTION 5 — FIRE FIGHTING MEASURES

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**Extinguishing Media:** Water fog, alcohol foam, carbon dioxide, dry chemical.

**Special Firefighting Procedures:** Firefighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Minimize and contain water runoff.

**Flash Point:** .....>100 °C

**Conditions of Flammability:** .....Not classified as a combustible liquid, but may burn under fire conditions.

**Hazardous Decomposition Products:** ...Under fire conditions, may produce gases such as hydrogen chloride, nitrogen oxides and carbon oxides.

**National Fire Protection Association (NFPA) Hazard Rating:**

**Rating for this product:      Health: 2                      Flammability: 1                      Reactivity: 0**

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Use safety equipment and procedures appropriate to the size of the spill. Keep unnecessary people away. Avoid runoff to natural waters and sewers. Surround and absorb spills with inert material such as perlite, sawdust, clay granules, vermiculite, sand or dirt. Contain all affected material in a closed, labeled container for proper disposal. Isolate from other waste materials. Clean contaminated area such as hard surfaces with detergent and water, collecting cleaning solution for proper disposal. Large spills to soil or similar surfaces may necessitate removal of top soil.

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## SECTION 7 — HANDLING AND STORAGE

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**Handling:** Avoid contact with skin, eyes and clothing. After use, wash hands and other exposed skin. Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Remove and wash contaminated clothing before reuse. Avoid breathing spray mist. Do not eat, drink or smoke when using this product.

**Storage:** Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. May be stored at any temperature. Shake well before using.

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## SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

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### Control Parameters:

Component	TWA*	STEL*	Note
MCPA 2-ethylhexyl ester	N/E	N/E	None found
Petroleum distillates (contains)	1200 mg/m <sup>3</sup>	N/E	Manufactures recommendation, total hydrocarbon

\*Time Weighted Average, 8-hour unless otherwise noted

\*\*Short Term Exposure Level

N/E – Not Established

**Engineering Controls:** Use only outdoors or in a well-ventilated area.

**Personal Protective Equipment:** Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Applicators using a closed cab are not required to wear chemical resistant gloves. The field crew and the mixer/loaders must wear long-sleeved shirt, long pants and coveralls, chemical resistant gloves and goggles or face shield during mixing/loading, cleanup and repair.

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## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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**Note:** Physical data are typical values but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

**Physical state and appearance:** ..... Clear amber liquid  
**Odor:** ..... Slight aromatic and phenolic  
**Odor Threshold:** ..... No data  
**pH:** ..... 3.5 to 4.5 (1% aqueous solution)  
**Melting Point:** ..... No data  
**Freezing Point:** ..... < 32°F/ 0°C  
**Boiling Point:** ..... No data  
**Flash Point:** ..... >100°C  
**Evaporation Rate:** ..... No data  
**Flammability:** ..... No data  
**Explosive Limits:** ..... No data  
**Vapor Pressure:** ..... No data  
**Vapor Density:** ..... No data  
**Density:** ..... 1.04 to 1.08 g/cm<sup>3</sup> @ 68°F/20°C  
**Solubility:** ..... In water: Emulsifies  
**Partition Coefficient:** ..... No data  
**Auto Ignition Temperature:** ..... No data  
**Decomposition Temperature:** ..... No data  
**Viscosity:** ..... No data

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## SECTION 10 — STABILITY AND REACTIVITY

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**Reactivity:** Not reactive

**Chemical Stability:** Stable under normal handling and storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Excessive heat. Do not store near heat or flame

**Incompatible Materials:** Avoid contact with strong acidic, basic or oxidizing agents.

**Hazardous Decomposition Products:** Under fire conditions, may produce gases such as hydrogen chloride, nitrogen oxides and carbon oxides.

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## SECTION 11 — TOXICOLOGICAL INFORMATION

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This section is intended for use by toxicologists and other health professionals. Data obtained on similar products and on components are summarized below.

Acute oral toxicity Rat, LD50: ..... >1,000 mg/Kg

Acute dermal toxicity Rabbit, LD50: ..... >2,000 mg/Kg

Acute inhalation toxicity Rat, LD50: ..... >2.5 mg/L

Skin irritation Rabbit: ..... Slight

Eye irritation Rabbit: ..... Moderate

Skin sensitization Guinea Pig: ..... Potential sensitizer

Mutagenicity: ..... Mixed results in animal studies but weight of evidence indicate that MCPA is not mutagenic.

Chronic effects/carcinogenicity: ..... IARC – 2B (chlorophenoxy herbicides)

Toxicity to reproduction/fertility: ..... Animal studies have noted testicular effects and lower male fertility

Developmental toxicity/teratogenicity: ..... Animal studies have noted decreased fetal body weights at doses toxic to mother animals.

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## SECTION 12 — ECOLOGICAL INFORMATION

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This section is intended for use by eco-toxicologists and other environmental specialists. Data obtained on similar products and on components are summarized below.

### Ecotoxicity: (Technical)

#### Aquatic Toxicity:

Rainbow trout: ..... 96-Hour LC<sub>50</sub> (mg/L).....3.2

Bluegill sunfish: ..... 96-Hour LC<sub>50</sub> (mg/L) .....>3.2

Daphnia: ..... 48-Hour EC<sub>50</sub> (mg/L) ..... 0.28

Algae: Selenastrum ..... 20-Hpur EC<sub>50</sub> (mg ae/L)..... 0.25

Algae: Navicula ..... 120-Hpur EC<sub>50</sub> (mg ae/L).....1.25

Algae: Skeletonema ..... 120-Hpur EC<sub>50</sub> (mg ae/L)..... 0.085

#### Avian toxicity

Bobwhite quail: ..... Oral LD<sub>50</sub> (mg/kg)..... >2250

..... Dietary LDD<sub>50</sub> (mg ae/kg bw/d).....>3800

Mallard duck: ..... Dietary LDD<sub>50</sub> (mg ae/kg bw/d).....>930

#### Arthropod toxicity:

Honey bee: ..... LD<sub>50</sub> >210 µg 500 g/L MCPA 2EH formulation/bee (contact)

..... LD<sub>50</sub> >250 µg 500 g/L MCPA 2EH formulation/bee (oral)

**Soil organism toxicity, invertebrates:**

Earthworm:..... No data

**Persistence and Degradability:** MCPA 2EH rapidly hydrolyzes to parent MCPA acid. MCPA is microbially degraded with typical half-life (ester and acid) of 5 to 20 days. Persistent in anaerobic environments.

**Bioaccumulation Potential:** Negligible.

**Mobility in Soil:** Moderate to high mobility potential, but rapidly degraded.

**Other Adverse Effects:** No data.

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## SECTION 13 — DISPOSAL CONSIDERATIONS

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For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Disposal should be made in accordance with federal, provincial and local regulations.

Do not reuse container for any purpose. If applicable, return container in accordance with return program. If a recyclable container, dispose of at a container collection site. Contact local distributor, dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site, triple or pressure rinse the empty container adding rinsings to spray tank, and make container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

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## SECTION 14 — TRANSPORTATION INFORMATION

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The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

**CANADA:**

**TDG Classification – Road/Rail:**

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (MCPA Ester), Class 9, PG III, Marine Pollutant.

Section 1.45.1 of the TDG Regulations provides an exemption from documentation and safety marks only for this product and only when transported by a road or railway vehicle.

**UNITED STATES:**

**DOT Classification:**

< 119 gallons per complete package  
Non-Regulated

≥ 119 gallons per complete package  
NA 3082, Environmentally hazardous substance, liquid, n.o.s. (MCPA Ester), 9, III Marine Pollutant

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## SECTION 15 — REGULATORY INFORMATION

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This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control product label:



WARNING POISON

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## SECTION 16 – OTHER INFORMATION

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This Safety Data Sheet (SDS) is designed to comply with the Globally Harmonized System (GHS) of chemical hazard classification. The information given here is not necessarily exhaustive but is representative of relevant, reliable data. Follow all local/regional/national/international regulations.

**HMIS Rating:** 2 Health; 1 Flammability; 0 Reactivity

0 = Minimal hazard, 1 = Slight hazard, 2 = Moderate hazard, 3 = Severe hazard, 4 = Extreme hazard

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE Pest Management Regulatory (PMRA)- APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by product labeling and provincial legislation, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the PMRA-approved label.

**Prepared by:** Albaugh, LLC

**Preparation date:** 04/10/2019

**Revision date:** 04/10/2019

**Revised For:** Revised for GHS formatting