



**Product Name:
CS-100-12 Herbicide
PCP # 33015**

CS-100-12 Herbicide is considered a mechanical mixture of two individual products. Attached are the component product SDS which make up CS-100-12 Herbicide.

Thifensulfuron 50 SG MUP

PCP # 28809

SDS Date: 03/01/2018

Ref: 130000036149

GP MUP

PCP # 32117

SDS Date: 03/19/2018

Please review the attached SDS, for a full and complete understanding of the hazards associated with each product before use.

Manufacturer/Distributor:

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104
USA

Telephone Numbers:

Product Information: 1-215-299-6000
Medical Emergency: 1-800-331-3148 (USA & Canada)
Preparation Date: 01/29/2019

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Thifensulfuron 50 SG MUP

Version 1.0

Revision Date 03/01/2018

Ref. 130000036149

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 : Thifensulfuron 50 SG MUP
 Tradename/Synonym : DPX-M6316 50SG
 B11646126
 THIFENSULFURON METHYL: Methyl 3-[[[(4-methoxy-6-methyl-1,3,5- triazin-2-yl)amino]carbonyl]amino] sulfonyl]-2-thiophenecarboxylate
 C11224244 - HARMONY 50SX (M)

MSDS Number : 130000036149

Product Use : Herbicide
 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 (U.S.A. & Canada)
 1 651 / 632-6793 (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

Potential Health Effects

Skin
 Thifensulfuron methyl : May cause skin irritation.
 May cause: Irritation with discomfort or pain, redness or rash, itching or swelling.

Eyes
 Thifensulfuron methyl : May cause eye irritation.
 May cause: Tearing, redness, or discomfort.

Inhalation
 Thifensulfuron methyl : May cause: Respiratory irritation, Discomfort, Cough.

Carcinogenicity

Thifensulfuron 50 SG MUP

Version 1.0

Revision Date 03/01/2018

Ref. 130000036149

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Thifensulfuron methyl	79277-27-3	50 %
Other Ingredients		50 %

SECTION 4. FIRST AID MEASURES

- 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.
- Inhalation : 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.
- General advice : Never give anything by mouth to an unconscious person.
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.

SECTION 5. FIREFIGHTING MEASURES

- Flammable Properties
- Flash point : Not applicable

Thifensulfuron 50 SG MUP

Version 1.0

Revision Date 03/01/2018

Ref. 130000036149

Lower explosion limit/ lower flammability limit : 0.1 - 0.25 g/l

Fire and Explosion Hazard : Under severe dusting conditions, this material may form explosive mixtures in air.

Suitable extinguishing media : Water spray, Dry chemical, Foam, Carbon dioxide (CO₂)

Unsuitable extinguishing media : High volume water jet, (contamination risk)

Firefighting Instructions : Wear full protective clothing and self-contained breathing apparatus. (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.

Spill Cleanup : Sweep up and shovel into suitable containers for disposal. For minor spills, leaks, etc., follow all precautions indicated on the label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas. 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. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on

Thifensulfuron 50 SG MUP

Version 1.0

Revision Date 03/01/2018

Ref. 130000036149

clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. **IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified for "Applicators and Other Handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

Personal protective equipment
 Skin and body protection : Applicators and other handlers must wear:
 Long sleeved shirt and long pants
 Chemical resistant gloves made of any waterproof material
 Shoes plus socks
 PPE required for early entry to treated areas that is permitted under the Worker Protection Standard 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.

Exposure Guidelines
 Exposure Limit Values

No data available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : granules

Thifensulfuron 50 SG MUP

Version 1.0

Revision Date 03/01/2018

Ref. 130000036149

Color : light brown
Odor : mild
pH : 8.7 - 9.7
Melting point/range : ca. 182 °C (360 °F)
Bulk density : Tapped
Water solubility : soluble

SECTION 10. STABILITY AND REACTIVITY

Stability : Stable at normal temperatures and storage conditions.
Conditions to avoid : None reasonably foreseeable.
Incompatibility : No materials to be especially mentioned.
Hazardous reactions : Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Thifensulfuron 50 SG MUP

Inhalation 4 h LC50 : > 5.3 mg/l , Rat
Dermal LD50 : > 5,000 mg/kg , Rabbit
Oral LD50 : > 5,000 mg/kg , Rat
Skin irritation : No skin irritation, Rabbit
Eye irritation : No eye irritation, Rabbit
Sensitisation : Animal test did not cause sensitization by skin contact., Guinea pig

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

Thifensulfuron 50 SG MUP

Version 1.0

Revision Date 03/01/2018

Ref. 130000036149

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

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Thifensulfuron 50 SG MUP

96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 120 mg/l

14 d EC50 : Lemna gibba (duckweed) 0.00130 mg/l

48 h EC50 : Daphnia magna (Water flea) > 120 mg/l

Thifensulfuron methyl

28 d : NOEC Americamysis bahia (mysid shrimp) 7.93 mg/l

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. Do not apply where/when conditions favour runoff.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : 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.

Container disposal: : Container Refilling and Disposal:
Refer to the product label for instructions.

Thifensulfuron 50 SG MUP

Version 1.0

Revision Date 03/01/2018

Ref. 130000036149

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

SECTION 14. TRANSPORT INFORMATION

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

SECTION 15. REGULATORY INFORMATION

PCP Registration #	: 28809
Remarks	: Regulated under the Pest Control Products Act - WHMIS exempt.

SECTION 16. OTHER INFORMATION

MSDS preparation date : 03/01/2018

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Thifensulfuron 50 SG MUP

Version 1.0

Revision Date 03/01/2018

Ref. 130000036149

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

Disclaimer

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



Material Safety Data Sheet

Issue Date: 03/19/2018
Print Date: 03/19/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **GP MUP**

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 (U.S.A. & Canada)
1 651 / 632-6793 (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)

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance

Physical state Granules.

Color Tan

Odor Mild

Hazard Summary

WARNING!!

May cause allergic skin reaction.

May cause eye irritation.

Isolate area.

Toxic fumes may be released in fire situations.

Slipping hazard.

Highly toxic to fish and/or other aquatic organisms.

Potential Health Effects

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

Skin: Brief contact may cause slight skin irritation with local redness.
Prolonged skin contact is unlikely to result in absorption of harmful amounts.
For the active ingredient(s):
Has caused allergic skin reactions when tested in guinea pigs.

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

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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Weight percent
Substituted Quinoline Derivative	Trade Secret	Trade secret
Pyroxsulam	422556-08-9	21.5%
Kaolin	1332-58-7	4.2%
Balance	Not available	Trade secret

4. FIRST AID MEASURES

Description of first aid measures

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

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

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

Eye contact: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

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

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

Indication of any immediate medical attention and special treatment needed

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

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

Unsuitable extinguishing media: No data available

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 chloride. Dense smoke. Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: No data available

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. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

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

6. ACCIDENTAL RELEASE MEASURES

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

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

Methods and materials for containment and cleaning up: Contain spilled material if possible. Small spills: Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact FMC Corporation for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep out of reach of children. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Do not swallow. Avoid breathing dust or mist. 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. Do not store near food, foodstuffs, drugs or potable water supplies.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Pyroxsulam		TWA	5 mg/m ³
		TWA	Skin Sensitizer
Kaolin	ACGIH	TWA Respirable fraction	2 mg/m ³
		CA AB OEL	2 mg/m ³
		CA BC OEL	2 mg/m ³
		CA QC OEL	TWAEV respirable dust 5 mg/m ³

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: Polyvinyl chloride ("PVC" or "vinyl"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Granules.
Color	Tan
Odor	Mild
Odor Threshold	No data available
pH	4.13 <i>pH Electrode</i>
Melting point/range	No data available
Freezing point	Not applicable
Boiling point (760 mmHg)	Not applicable
Flash point	closed cup Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	Not applicable
Relative Vapor Density (air = 1)	Not applicable
Relative Density (water = 1)	No data available

Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Dynamic Viscosity	Not applicable
Kinematic Viscosity	No data available
Explosive properties	No
Oxidizing properties	No significant increase (>5C) in temperature.
Bulk density	0.591 g/ml <i>Loose Volumetric</i> 0.6538 g/ml <i>Tapped Volumetric</i>
Molecular weight	No data available

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

10. STABILITY AND REACTIVITY

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

Chemical stability: Thermally stable at typical use temperatures.

Possibility of hazardous reactions: Polymerization will not occur.

Conditions to avoid: Exposure to elevated temperatures can cause product to decompose.

Incompatible materials: Avoid contact with: Strong oxidizers.

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide. Hydrogen chloride. Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Toxicological information appears 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: Single dose oral LD50 has not been determined. Based on information for component(s): Estimated.
LD50, Rat, > 5,000 mg/kg

Acute dermal toxicity

As product: The dermal LD50 has not been determined. Based on information for component(s):
Estimated.
LD50, Rat, > 5,000 mg/kg

Acute inhalation toxicity

No adverse effects are anticipated from single exposure to dust. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).
As product: The LC50 has not been determined.

Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness.

Serious eye damage/eye irritation

May cause moderate eye irritation.
Corneal injury is unlikely.

Sensitization

For the active ingredient(s):
Has caused allergic skin reactions when tested in guinea pigs.
Did not demonstrate 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):
In animals, effects have been reported on the following organs:
Liver.

Carcinogenicity

For the active ingredient(s): Pyroxsulam. For similar active ingredient(s). Did not cause cancer in laboratory animals.

Teratogenicity

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

Reproductive toxicity

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

Mutagenicity

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

Aspiration Hazard

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

COMPONENTS INFLUENCING TOXICOLOGY:

Substituted Quinoline Derivative

Acute inhalation toxicity

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

LC50, Rat, male and female, 4 Hour, dust/mist, > 6.11 mg/l No deaths occurred at this concentration.

Pyroxsulam

Acute inhalation toxicity

LC50, Rat, 4 Hour, Aerosol, > 5.12 mg/l No deaths occurred at this concentration.

Kaolin

Acute inhalation toxicity

As product: The LC50 has not been determined.

Balance

Acute inhalation toxicity

The LC50 has not been determined.

12. ECOLOGICAL INFORMATION

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

Toxicity

Acute toxicity to algae/aquatic plants

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

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, 5.3 mg/l, OECD Test Guideline 201

ErC50, Lemna gibba, 7 d, 0.0015 mg/l

NOEC, Lemna gibba, 7 d, 0.0026 mg/l

Persistence and degradability

Substituted Quinoline Derivative

Biodegradability: No relevant data found.

Pyroxsulam

Biodegradability: 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.

10-day Window: Fail

Biodegradation: 20 - 30 %

Exposure time: 28 d

Method: OECD Test Guideline 301B or Equivalent

Kaolin

Biodegradability: Biodegradation is not applicable.

Balance

Biodegradability: No relevant data found.

Bioaccumulative potential

Substituted Quinoline Derivative

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

Partition coefficient: n-octanol/water(log Pow): 2.12 Estimated.

Pyroxsulam

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

Partition coefficient: n-octanol/water(log Pow): -1.01 Measured

Balance

Bioaccumulation: No relevant data found.

Mobility in soil

Substituted Quinoline Derivative

Potential for mobility in soil is medium (Koc between 150 and 500).

Partition coefficient(Koc): 206 Estimated.

Pyroxsulam

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

Partition coefficient(Koc): <= 42 Estimated.

Balance

No relevant data found.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

TDG

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(PYROXSULAM)
UN number	UN 3077
Class	9
Packing group	III
Marine pollutant	PYROXSULAM

Classification for SEA transport (IMO-IMDG):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(PYROXSULAM)
UN number	UN 3077
Class	9
Packing group	III
Marine pollutant	PYROXSULAM
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 (IATA/ICAO):

Proper shipping name	Environmentally hazardous substance, solid, n.o.s.(PYROXSULAM)
UN number	UN 3077
Class	9
Packing group	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.

15. REGULATORY INFORMATION

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: 32117

16. OTHER INFORMATION

Hazard Rating System**NFPA**

Health	Fire	Reactivity
1	0	0

Revision

Identification Number: 101300824 / A215 / Issue Date: 02/05/2016 / Version: 2.0

DAS Code: GF-3361

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

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	Canada. British Columbia OEL
CA QC OEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
TWA	8-hour time weighted average
TWAEV	Time-weighted average exposure value

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.

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