



**Product Name:**  
**PrecisionPac® DB-8454 Herbicide**

PrecisionPac® DB-8454 Herbicide is considered a mechanical mixture of three individual products. Attached are the component product SDS which make up PrecisionPac® DB-8454 Herbicide.

Express® SG MUP

PCP # 28176

MSDS Date: 03/01/2018

Ref: 130000012165

Thifensulfuron 50 SG MUP

PCP # 28809

MSDS Date: 03/01/2018

Ref: 130000036149

Dry Dicamba MUP

PCP # 28735

MSDS Date: 01/29/2018

Ref: 130000148580

Since Express® SG MUP, Thifensulfuron 50 SG MUP and Dry Dicamba MUP do not interact chemically when combined, the mixture can therefore be assumed to have the same properties and hazards as the individual components. 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: 1-833-362-7722

Medical Emergency: 1-800-331-3148 (USA & Canada)

Preparation Date: March 29, 2018

Member of CropLife Canada

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**SAFETY DATA SHEET**  
Dry Dicamba MUP

SDS #: 130000148580-A  
Revision date: 2018-01-29  
Format: NA  
Version 1



**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** Dry Dicamba MUP

**Other means of identification**

**Product Code(s)** 130000148580-A

**PCP #** 28735

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

**Recommended Use:** To be used as an active ingredient in herbicides only

**Restrictions on Use:** Use as recommended by the label

**Supplier Address**

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

**Emergency telephone number**

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)

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

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Specific target organ toxicity (repeated exposure)	Category 2

**GHS Label elements, including precautionary statements**

**EMERGENCY OVERVIEW**

**Warning**

**Hazard Statements**

H332 - Harmful if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements - Prevention**

P281 - Use personal protective equipment as required

P273 - Avoid release to the environment

**Precautionary Statements - Response**

P308 + P313 - If exposed or concerned: Get medical advice/attention

P391 - Collect spillage

**Precautionary Statements - Disposal**

P501 - Dispose of contents/container according to label directions

**Hazards not otherwise classified (HNOC)**

No hazards not otherwise classified were identified.

**Other Information**

Harmful to aquatic life with long lasting effects.

Excessive dust formation may pose a dust explosion hazard.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS-No	Weight %
Sodium 3,6-dichloro-o-anisate	1982-69-0	77 - 78.5

Synonyms are provided in Section 1.

**4. FIRST AID MEASURES**

**Eye Contact**

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further 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 further treatment advice.

**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 further treatment advice.

**Ingestion**

Call a physician or poison control center immediately. 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.

**Most important symptoms and effects, both acute and delayed**

Symptoms of poisoning may occur after several hours; therefore medical observation for at least 48 hours after the accident is warranted.

**Indication of immediate medical attention and special treatment needed, if necessary**

Treatment is symptomatic and supportive. Show this material safety data sheet to the doctor in attendance.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Dry chemical, carbon dioxide, water spray or regular foam. Cool containers with flooding quantities of water until well after fire is out. Dike fire control water for later disposal; do not scatter the material.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific Hazards Arising from the Chemical</b>	Dust may form explosive mixture in air. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Burning chemicals may produce by-products more toxic than the original material.
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	No information available.
<b>Sensitivity to Static Discharge</b>	Static electricity might be sufficient to ignite dust clouds. Possibility of ignition will depend on the minimum ignition energy (MIE) and the type of operations undertaken with the material. MIE values are not provided in this SDS.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate upwind.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Evacuate non-essential personnel. Keep people away from and upwind of spill/leak. Isolate and post spill area. Avoid dust formation. Do not breathe dust. Ensure adequate ventilation. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection see section 8.
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains. Keep out of waterways.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so. Dike far ahead of spill to collect runoff water. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
<b>Methods for cleaning up</b>	Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13).

## 7. HANDLING AND STORAGE

<b>Handling</b>	Ensure adequate ventilation. Avoid dust formation. Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking, chewing gum, using tobacco, or using toilet. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. Wash thoroughly after handling. Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.
<b>Storage</b>	Store at 0° - 30 °C. Keep away from open flames, hot surfaces and sources of ignition. Keep container tightly closed in a dry and well-ventilated place. Avoid contact with water or humidity. Keep away from direct sunlight. Keep out of reach of children and animals.
<b>Incompatible products</b>	Strong acids, strong bases

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering measures** Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Tightly fitting safety goggles.

**Skin and Body Protection** Wear long-sleeved shirt, long pants, socks, and shoes. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Avoid contact with skin and clothing. Chemical resistant gloves and boots are recommended.

**Hand Protection** Wear chemical protective gloves made of materials such as nitrile or neoprene. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion and the contact time.

**Respiratory Protection** Use only with adequate ventilation. Wear respirator with particle filter mask.

**Hygiene measures** Clean water should be available for washing in case of eye or skin contamination. Remove and wash contaminated clothing before re-use. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Launder work clothing separately from regular household laundry.

**General information** If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Appearance</b>	No information available
<b>Physical State</b>	Solid
<b>Color</b>	Light brown
<b>Odor</b>	Nearly odorless
<b>Odor threshold</b>	No information available
<b>pH</b>	7.3 - 7.5
<b>Melting point/freezing point</b>	No information available
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	Not applicable
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	Not highly flammable
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Density</b>	0.58 - 0.61 g/cm <sup>3</sup> @ 20°C
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	Product is not explosive, but the formation of explosive dust air mixtures are possible

**Oxidizing properties** No information available  
**Molecular weight** No information available  
**Bulk density** No information available

## 10. STABILITY AND REACTIVITY

**Reactivity** None under normal use conditions

**Chemical Stability** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions** None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** Heat, flames and sparks

**Incompatible materials** Strong acids, strong bases.

**Hazardous Decomposition Products** None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

**LD50 Oral** > 2000 mg/kg (rat)  
**LD50 Dermal** > 2000 mg/kg (rat)  
**LC50 Inhalation** > 4.3 mg/L (rat)

**Serious eye damage/eye irritation** Slightly or non-irritating (rabbit).  
**Skin corrosion/irritation** Non-irritating.  
**Sensitization** May cause sensitization by skin contact

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Mutagenicity** No known mutagenic or teratogenic effects.  
**Carcinogenicity** No evidence of carcinogenicity from animal studies  
**Reproductive toxicity** No toxicity to reproduction in animal studies.  
**Developmental toxicity** Not teratogenic in animal studies.  
**STOT - single exposure** May cause damage to organs. See listed target organs below.  
**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure. See listed target organs below.

**Target organ effects** Possible risk of impaired fertility  
**Aspiration hazard** No information available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects

**Persistence and degradability** Not readily biodegradable.

**Bioaccumulation** No information available.

**Mobility** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods** Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these

wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

**Contaminated Packaging**

Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

**14. TRANSPORT INFORMATION**

**DOT**

Not regulated for transportation if shipped in Non Bulk packaging. The classification below pertains to the shipment in Bulk packaging.

**UN/ID no** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s. (dicamba)  
**Hazard class** 9  
**Packing Group** III  
**Marine Pollutant** Dicamba.  
**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (dicamba)

**TDG**

**UN/ID no** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**Marine Pollutant** Dicamba.  
**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (dicamba)

**ICAO/IATA**

**UN/ID no** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (dicamba)

**IMDG/IMO**

**UN/ID no** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**EmS No.** F-A, S-F  
**Marine Pollutant** Dicamba  
**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (dicamba)

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Sodium 3,6-dichloro-o-anisate - 1982-69-0	1982-69-0	77 - 78.5	1.0

**SARA 311/312 Hazard Categories**

**Acute health hazard** Yes  
**Chronic health hazard** Yes  
**Fire hazard** No

Sudden release of pressure hazard  
Reactive Hazard

No  
No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium 3,6-dichloro-o-anisate 1982-69-0	X		

**International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Sodium 3,6-dichloro-o-anisate 1982-69-0	X	X	X					

**CANADA**

**WHMIS Statement**

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

**16. OTHER INFORMATION**

NFPA	Health Hazards 1	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 1*	Flammability 1	Physical hazard 0	Personal Protection X

\*Indicates a chronic health hazard.

**NFPA/HMIS Ratings Legend**

Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Revision date:

2018-01-29

Reason for revision:

Initial Release

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. **NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN.** The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared By:

FMC Corporation

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**End of Safety Data Sheet**

**Express® SG herbicide**

Version 1.0

Revision Date 03/01/2018

Ref. 130000012165

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 : Express® SG herbicide  
Tradename/Synonym : B11646119  
DPX-L5300 50SG  
Tribenuron methyl 50SG  
Affinity 2 Herbicide  
Affinity 50 SG  
Granstar 50 SG  
Tribenuron methyl: Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylamino]carbonyl]amino]sulfonyl]benzoate  
Express® SG MUP

SDS Number : 130000012165

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**

## Emergency Overview

## Caution

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes and clothing.

## Potential Health Effects

This section includes potential acute adverse effects which could occur if this material is not used according to the label.

## Skin

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Tribenuron methyl : May cause allergic skin reaction.

**Carcinogenicity**

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.

Tribenuron methyl : DuPont has classified this material as a probable human carcinogen.

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

Component	CAS-No.	Concentration
Tribenuron methyl	101200-48-0	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. Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.
- Ingestion** : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.

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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.

Notes to physician : Treat symptomatically.

**SECTION 5. FIREFIGHTING MEASURES**

Flammable Properties

Flash point : Not applicable

Fire and Explosion Hazard : Not a fire or 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.

**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.

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.

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**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 clean clothing. Wash the outside of gloves before removing. Remove personal protective equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition.
- Storage : Store in original container. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place. Keep out of the reach of children.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Engineering controls : Use only with adequate ventilation.
- Personal protective equipment
- Respiratory protection : No personal respiratory protective equipment normally required.
- Skin and body protection : Applicators and other handlers must wear:  
Long sleeved shirt and long pants  
Shoes plus socks  
Chemical resistant gloves made of any waterproof material, such as polyethylene or polyvinyl chloride.  
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. Notify workers of the application by warning them orally or by posting warning signs at entrances to treated areas.
- Exposure Guidelines  
Exposure Limit Values
- No data available

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Form	: solid, granular
Color	: light brown
Odor	: mild
pH	: 8.4 - 9.4 at 10 g/l 20 °C (68 °F) (1% solution in water)
Oxidizing Substance	: The product is not oxidizing.
Bulk density	: 640 kg/m <sup>3</sup> packed
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**

Express® SG herbicide	
Dermal LD50	: > 5,000 mg/kg , Rat
Oral LD50	: > 5,000 mg/kg , Rat
Skin irritation	: No skin irritation, Rabbit
Eye irritation	: No eye irritation, Rabbit
Sensitisation	: The product is a skin sensitiser, sub-category 1B., Guinea pig
Tribenuron methyl	
Inhalation 4 h LC50	: > 6.0 mg/l , Rat
Repeated dose toxicity	: The following effects occurred at levels of exposure that significantly

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exceed those expected under labeled usage conditions.

Oral - feed  
 Mouse  
 90 d  
 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

**SECTION 12. ECOLOGICAL INFORMATION**
**Aquatic Toxicity**

Express® SG herbicide

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 120 mg/l
- 72 h ErC50 : Pseudokirchneriella subcapitata (microalgae) > 0.080 mg/l
- 48 h EC50 : Daphnia (water flea) > 120 mg/l

- Additional ecological information** : 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**

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Ref. 130000012165

- 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.  
Do not transport if this container is damaged or leaking.

**SECTION 14. TRANSPORT INFORMATION**

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Tribenuron 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)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9

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 # : HERBICIDE: 28262 /MUP: 28176

**Express<sup>®</sup> SG herbicide**

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Revision Date 03/01/2018

Ref. 130000012165

Remarks : Regulated under the Pest Control Products Act - WHMIS exempt.

**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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## Thifensulfuron Methyl 50 SG Herbicide

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 Methyl 50 SG Herbicide  
 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

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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

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- 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

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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

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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 Methyl 50 SG Herbicide

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

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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

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96 h LC50 : Oncorhynchus mykiss (rainbow trout) &gt; 120 mg/l

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

48 h EC50 : Daphnia magna (Water flea) &gt; 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.

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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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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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