

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 (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

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.

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 ³ 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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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

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



Material Safety Data Sheet

Issue Date: 03/19/2018

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Dicamba L Herbicide**

PCP#: **31536**

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)

2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS:

	<u>(% w/w)</u>
Dicamba Dimethylamine Salt (CAS Reg. No. 2300-66-2)	49.77
DMA Salt of 3,6-dichloro- <i>o</i> -anisic acid *	
Dimethylamine Salt of Related Acids	0.60
Inert Ingredients	49.63

* Contains 41.35% dicamba acid equivalent, or 4 lbs/gallon (480 grams/liter)

Chemical Class: Benzoic acid herbicide

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

- EPA Signal Word: Caution
- Eye irritant
- Harmful if swallowed or absorbed through the skin.
- Avoid contact with skin, eyes and clothing.
- In a fire, toxic irritating gases can be formed.
- For exposure to fire, wear protective equipment.

4. FIRST AID MEASURES

IF SWALLOWED: Call poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Remove 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 center or doctor for further treatment advice.

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 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 center or doctor for treatment advice.

5. FIRE FIGHTING MEASURES

Flash Point:	Does not flash
Flammability Limits:	LFL - Not applicable UFL - Not applicable
Extinguishing Media:	Water spray, foam, dry chemical. Foam fire-extinguishing system is preferred because uncontrolled water can spread possible contamination.
Fire-fighting Equipment:	Use positive-pressure self-contained breathing apparatus and full protective equipment. Toxic irritating gases can be formed.
Special Instructions:	Do not allow fire fighting water to escape into waterways or sewers.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: Absorb liquid with material such as sand, sawdust, or dirt. Sweep up and place in a suitable container for disposal. Area can be washed down with water and detergent to remove remaining herbicide. Keep product, contaminated materials and wash water out of sewers. Wash exposed body areas thoroughly after handling.

7. HANDLING AND STORAGE

See label. Causes eye irritation. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating or smoking. Avoid breathing mist. Keep away from food, feedstuffs, and water supplies.

8. PERSONAL PROTECTION

EXPOSURE GUIDELINE(S): ACGIH TLV and OSHA PEL levels are not established for dicamba acid or dicamba dimethylamine salt. For dimethylamine, the OSHA and ACGIH exposure limits based upon TWA and STEL are 9.2 mg/m³ and 27.6 mg/m³, respectively.

VENTILATION: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guideline.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. For most conditions, no respiratory protection should be needed; however, if the exposure guideline is exceeded, use an approved organic vapor/mist respirator.

EYE/FACE PROTECTION: Use protective eyewear.

SKIN PROTECTION: Wear long-sleeved shirt and long pants, waterproof gloves and shoes plus socks when handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Amber
Physical state:	Liquid
Odor:	Mild amine odor
Boiling point:	212°F (100°C)
Density:	9.68 lbs/gal (1.16 gm/cm ³)
Solubility:	Fully soluble in water
Vapor pressure:	18 mm Hg at 20°C
Vapor density:	>1.0 (Air=1)
pH:	7 to 8
Stability:	Stable

10. STABILITY AND REACTIVITY

Stability:	(CONDITIONS TO AVOID) None known.
Conditions to avoid:	(SPECIFIC MATERIALS TO AVOID) None known.
Hazardous decomposition products:	In a fire, steam, dicamba amine salt, hydrogen chloride, organochloride products, oxides of nitrogen, or carbon monoxide can be formed.
Hazardous polymerization:	No data available.

11. TOXICOLOGICAL INFORMATION

EYE: Causes eye irritation.

SKIN CONTACT: Exposure may cause skin irritation and dermal sensitization.

SKIN ABSORPTION: The acute dermal toxicity is considered to be low. The percutaneous LD₅₀ for rabbits is greater than 2000 mg/kg.

INGESTION: The acute oral toxicity is considered to be low. The oral LD₅₀ for rats is 2629 mg/kg. Small amounts that might be swallowed incidental to normal handling operations are not likely to cause injury; swallowing larger amounts may be hazardous.

INHALATION: The acute inhalation toxicity is considered to be low. The LC₅₀ for rats is greater than 5.4 mg/l for 4 hours.

CANCER INFORMATION: Did not cause cancer in long-term animal studies. There were no treatment related increases in tumors at dietary levels up to 2500 ppm (rats and dogs) and 3000 ppm (mice).

TERATOLOGY (BIRTH DEFECTS): Did not cause birth defects in animal studies. Exposures having no effect on the mothers had no effect on the fetuses. The maternal and fetal no effect levels in rabbits were 30 mg/kg and 300 mg/kg, respectively. In the rat teratology study, the maternal and fetal no effect levels were 160 mg/kg and 400 mg/kg, respectively.

REPRODUCTIVE EFFECTS: Dicamba did not interfere with fertility in reproduction studies in laboratory animals. The no effect level in a two-generation rat reproduction study was 500 ppm.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Based on a number of *in vivo* and *in vitro* studies, the preponderance of data suggests that dicamba is not a mutagen.

12. 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 disposing of equipment washwater or rinsate. Do not apply directly to water, surface waters or runoff areas. Avoid spray drift and other means of exposure to sensitive plants and other non-target areas. This pesticide may cause injury to desirable trees and plants.

13. DISPOSAL CONSIDERATIONS

Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control.

14. TRANSPORT INFORMATION

U.S. DOT CLASSIFICATION

PROPER SHIPPING NAME:

= or > 248 gal: Environmentally Hazardous Substances, Liquid N.O.S. (Dicamba)
< 248 gal: None

U.S. D.O.T. HAZARD CLASSIFICATION:

PRIMARY: = or > 248 gal: Environmentally Hazardous Substances
< 248 gal: None

SECONDARY: None

U.S. D.O.T. BILL OF LADING DESCRIPTION:

= or > 248 gal: UN 3082 Environmentally Hazardous Substances, Liquid, N.O.S. 9,
PG III, RQ (Dicamba), ERG 171
< 248 gal: Compounds, Tree or Weed Killing (Herbicides) NOIBN

CERCLA REPORTABLE QUANTITY:

Dicamba has a Reportable Quantity (RQ) of 1000 pounds (248 gal of product).

CANADA TDG CLASSIFICATION

UN Number: UN3082

Shipping Name and Description: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (DICAMBA)

Class: 9

Packing Group/Category: III

SOR/2014-306

Special Provisions: 16/99

**NOT REGULATED FOR TDG WHEN SHIPPED BY ROAD OR RAIL
IN CONTAINERS LESS THAN 450 LITRES.**

Explosive Limit and Limited Quantity Index: 5

ERAP Index: NONE

Marine Pollutant:

15. REGULATORY INFORMATION

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Category	Rating
Health	1
Flammability	0
Reactivity	0

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND): This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA, which may require reporting of releases:

Category:

Chemical Name	CAS Number	RQ	% in Product
Dicamba	1918-00-9	1000	41.35%

Canada:
Regulated under the Pest Control Product Act – WHMIS exempt

PCP#: 31536

16. OTHER INFORMATION

Issue Date: March 19, 2018

The information contained in this SDS is based strictly on information from FMC Corporation

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