

# SAFETY DATA SHEET

## Fluthiacet-methyl Technical

SDS #: 005197-A

Revision date: 2016-05-26

Version 1.05



### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Fluthiacet-methyl Technical  
**Active Ingredient(s)** Fluthiacet-methyl  
**Chemical Family** Imine chemicals  
**Synonyms** FLUTHIACET-METHYL: methyl {  
2-chloro-4-fluoro-5-[(EZ)-5,6,7,8-tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylideneamino]phenylthio} acetate (IUPAC Name); methyl  
2-[[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1H,3H-[1,3,4]thiadiazolo[3,4-a]pyridazin-1-ylidene)amino]phenyl]thio]acetate(CAS Name)  
**Formula** C<sub>15</sub>H<sub>15</sub>ClFN<sub>3</sub>O<sub>3</sub>S<sub>2</sub> (fluthiacet-methyl)  
**Recommended Use:** Herbicide.

#### Manufacturer/Supplier

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

#### Emergency telephone number

Medical Emergencies:  
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)  
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)  
For leak, fire, spill or accident emergencies, call:  
1 800 / 424 9300 (CHEMTREC - U.S.A.)  
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)  
Responsible/issuing person

Official National Emergency Telephone  
Number or Poison Control Center Number

### 2. HAZARDS IDENTIFICATION

#### Classification of the chemical

Serious eye damage/eye irritation	Category 2B
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

#### Labeling

Symbol(s)



**Hazard Statements**

H320 - Causes eye irritation

H410 - Very toxic to aquatic life with long lasting effects

**Precautionary statements**

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P337 + P313 - If eye irritation persists: Get medical advice/ attention  
 P501 - Dispose of contents/ container to an approved incineration plant  
 P273 - Avoid release to the environment  
 P264 - Wash face, hands and any exposed skin thoroughly after handling

**Hazards not otherwise classified (HNOC)**

**General Hazards** None known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	Weight %	ENCS (Japan)	ISHL No	CAS-No
Fluthiacet-methyl	96			117337-19-6

**4. FIRST AID MEASURES**

**Eye Contact** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. 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, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**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 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** None known.

**5. FIRE-FIGHTING MEASURES**

**Flammable properties** Powdered material may form explosive dust-air mixtures.

**Suitable Extinguishing Media** Foam, Carbon dioxide (CO<sub>2</sub>), Dry chemical, Water spray or fog, Avoid heavy hose streams.

**Protective equipment and precautions for firefighters** As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate downwind.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions** Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

**Environmental Precautions** Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

**Methods for Containment** Use a wet sweeping compound or water to prevent dust formation.  
**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste.

Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

**Other** For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

## 7. HANDLING AND STORAGE

**Handling** Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

**Storage** Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/store only in original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

### Occupational exposure controls

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

### Personal protective equipment

**General information** If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

**Respiratory Protection** For dust, splash, mist or spray exposures wear a filtering mask.

**Eye/Face Protection** For dust, splash, mist or spray exposure, wear chemical protective goggles.

**Skin and Body Protection** Wear long-sleeved shirt, long pants, socks, and shoes.

**Hand Protection** Protective gloves

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Off-white powder.
<b>Odor</b>	Odorless
<b>Physical State</b>	Free flowing powder
<b>pH</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Autoignition temperature</b>	Not applicable
<b>Boiling Point/Range</b>	Not applicable
<b>Melting Point/Range</b>	105.5-106.5 - 106.5 °C - 224°F
<b>Flammability Limits in Air</b>	
<b>Upper flammability limit:</b>	Not applicable
<b>Lower flammability limit:</b>	Not applicable
<b>Explosion limits</b>	
<b>Upper</b>	Not applicable
<b>Lower</b>	Not applicable
<b>Explosive properties</b>	Not applicable
<b>Oxidizing properties</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Density</b>	0.43 g/cm <sup>3</sup> @ room temperature

**solubility** Not applicable  
**Water solubility** 0.85 % @ 25 °C  
**Partition coefficient** Not applicable  
**Viscosity, dynamic** Not applicable

**10. STABILITY AND REACTIVITY**

**Stability** Stable under recommended storage conditions.  
**Conditions to Avoid** Heat, flames and sparks.  
**Incompatible products** Strong bases. Acids. Oxidizing agents.  
**Hazardous Decomposition Products** Carbon oxides (COx), Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride, Hydrogen fluoride.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**  
 Product Information.

**Skin Contact** Non-irritating (rabbit)  
**Eye Contact** Moderately irritating to the eyes  
**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.  
**LD50 Dermal** Fluthiacet-methyl: > 2000 mg/kg (rat)  
**LD50 Oral** Fluthiacet-methyl: > 5000 mg/kg (rat)  
**LC50 Inhalation** Fluthiacet-methyl: > 5.05 mg/L 4 hr (rat)  
**Sensitization** Non-sensitizer

**Chronic toxicity**

**Chronic toxicity** Fluthiacet-methyl: Effects are expected to be similar to those that are seen with acute toxicity.  
**Neurological effects** Fluthiacet-methyl: Not neurotoxic.  
**Target organ effects** Liver, bone marrow, spleen, pancreas, lymphatic system, hematopoietic system, uterus and blood.  
**Carcinogenicity** Fluthiacet-methyl caused increases in benign pancreatic tumors in male rats at the highest dose, along with pancreatic and liver toxicity. There was an increase in liver tumors at two highest doses in male mice, along with hepatotoxicity, that could both be secondary to liver toxicity. New data indicates that there is no human risk.  
**Mutagenicity** Fluthiacet-methyl: Not genotoxic in laboratory studies.  
**Reproductive toxicity** Fluthiacet-methyl: No toxicity to reproduction in animal studies  
**Developmental toxicity** Fluthiacet-methyl: A slight delay in fetal development in the rat, with no effects in the rabbit.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Fluthiacet-methyl (117337-19-6)				
Active Ingredient(s)	Duration	Species	Value	Units
Fluthiacet-methyl	72 h LC50	Algae	0.00251	mg/L
	96 h LC50	Fish	0.043	mg/L
	48 h EC50	Crustacea	2.3	mg/L
	21 d NOEC	Fish	0.0027	mg/L
	21 d NOEC	Crustacea	0.035	mg/L

**Persistence and degradability** Fluthiacet-methyl: Non-persistent. Does not readily hydrolyze.

## Fluthiacet-methyl Technical

SDS # : 005197-A

Revision date: 2016-05-26

Version 1.05

**Bioaccumulation** Fluthiacet-methyl: The substance does not have a potential for bioconcentration.

**Mobility** Fluthiacet-methyl: Slightly mobile; Not expected to reach groundwater.

**Other Adverse Effects** None known

## 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.

**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

**Packaging Type** Bulk, Non-Bulk

**DOT** This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

**TDG** Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

<b>UN/ID no</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Fluthiacet-methyl.
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Fluthiacet-methyl), 9, PG III, Marine Pollutant

### IMDG/IMO

<b>UN/ID no</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Fluthiacet-methyl
<b>EmS No.</b>	F-A, S-F
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Fluthiacet-methyl), 9, PG III, Marine Pollutant

### ICAO/IATA

<b>UN/ID no</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Fluthiacet-methyl
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Fluthiacet-methyl), 9, PG III, Marine Pollutant

## 15. REGULATORY INFORMATION

### International Inventories

ENCS - Japan Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

Japan

**16. OTHER INFORMATION**

**Revision date:** 2016-05-26  
**Reason for revision:** (M)SDS sections updated.

**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. 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

FMC Logo - Trademark of FMC Corporation

© 2016 FMC Corporation. All Rights Reserved.

**End of Safety Data Sheet**