



SAFETY DATA SHEET

Impact 12.5 SC

SDS # : FO004120-A
Revision date: 2018-06-28
Format: AP
Version 1

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Impact 12.5 SC
Product Code(s) FO004120-A
Recommended Use: Fungicide.
Restrictions on Use: Use as recommended by the label.

Manufacturer/Supplier

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

Importer

FMC VIETNAM COMPANY LIMITED
No. 12 lot B, Thong Nhat Road
Song Than 2 Industrial Zone
Di An Ward, Di An Town
Binh Duong Province
Vietnam
Phone: (+84) 0274 3790503
Fax: (+84) 0274 3790501

Emergency telephone

Medical Emergencies:
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

GHS - Classification

Skin sensitization	Category 1B
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 1

Label Elements



Signal Word

WARNING

Hazard Statements

H317 - May cause an allergic skin reaction
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P272 - Contaminated work clothing should not be allowed out of the workplace
 P280 - Wear eye protection/ face protection
 P273 - Avoid release to the environment

Precautionary Statements - Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
 P362 + P364 - Take off all contaminated clothing and wash it before reuse
 P391 - Collect spillage

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

Other Information

None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Flutriafol	76674-21-0	11.80
Alcohols, C13-15 Branched and Linear, Ethoxylated	157627-86-6	5-10

Section 4: FIRST AID MEASURES

Inhalation	Move to fresh air. If breathing is difficult or if discomfort occurs and persists, obtain medical attention.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.
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.
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 induce vomiting or give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	Asthma-like and/or skin allergy-like symptoms.
Protection of first-aiders	Use personal protective equipment. See Section 8 for more detail.
Indication of immediate medical attention and special treatment needed, if necessary	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical, Carbon dioxide (CO ₂), Alcohol-resistant foam, Water spray. Avoid heavy hose streams.
Unsuitable extinguishing media	No information available.
Specific Hazards Arising from the	Thermal decomposition can lead to release of irritating gases and vapors.

Chemical**Protective equipment and precautions for firefighters**

Isolate fire area. Evaluate upwind. As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

Isolate and post spill area. Wear protective gloves/clothing and eye/face protection. For personal protection see section 8.

Other

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

Environmental Precautions

Keep out of waterways. 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 for a minimum contact of one hour with vinegar-alcohol solution, then by bleach soap and water. Dispose of waste as indicated in Section 13.

Section 7: HANDLING AND STORAGE

Handling

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

Storage

Keep container tightly closed in a dry 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.

Materials to avoid

Strong oxidizing agents, Strong acids, Strong bases.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits**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.

Personal protective equipment**Respiratory Protection**

The product does not automatically present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment with a universal filter type including particle filter.

Hand Protection

Wear chemical protective gloves made of materials such as nitrile or neoprene.

Eye/Face Protection

For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection

Minimize skin contamination by following good industrial hygiene practices. Wear suitable protective clothing. Protective shoes or boots.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State
Appearance
Odor

Liquid Suspension
 Off-white / brown
 Characteristic odor between fish-and glue-like

Color	No information available
Odor threshold	No information available
pH	4.5 - 5 (1% dilution in water)
Melting point/freezing point	< 0 °C
Boiling Point/Range	> 100 °C
Flash point	> 100 °C
Evaporation Rate	No information available
Flammability (solid, gas)	Not applicable
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	Flutriafol: 7.1×10^{-9} Pa at 20°C
Vapor density	No information available
Specific gravity	No information available
Water solubility	Dispersible in water: 130 mg/l at 20°C
Solubility(ies)	
Solubility of flutriafol at 21°C in:	
acetone	114 - 133 g/l
n-heptane	<10 g/l
Partition coefficient	Flutriafol: log Kow = 2.29
Autoignition temperature	Approx. 450 °C
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Oxidizing properties	Non-oxidizing
Density	1.03 - 1.05 g/ml at 20°C
Bulk density	No information available

Section 10: STABILITY AND REACTIVITY

Reactivity	None under normal use conditions
Stability	Stable under recommended storage conditions
Hazardous reactions	None known.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to Avoid	Heat, flames and sparks.
Incompatible products	Strong oxidizing agents, Strong acids, Strong bases.

Hazardous Decomposition Products Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information No acute toxicity information is available for this product.

Numerical measures of toxicity - Product Information

LD50 Oral	> 3000 mg/kg (rat) (Method: OECD 423) (Based on a similar product)
LD50 Dermal	> 4000 mg/kg (rat) (Method: OECD 402) (Based on a similar product)
LC50 Inhalation	> 2.10 mg/L 4 hr (rat) (Method: OECD 403) (Based on a similar product)
Skin corrosion/irritation	Non-irritating (rabbit), (Method: OECD 404). (Based on a similar product).
Serious eye damage/eye irritation	Mildly irritating (rabbit). (Method: OECD 405). (Based on a similar product).

Sensitization Weakly sensitizing.
 (Method: OECD 406).

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

Mutagenicity The product contains no ingredients known to be mutagenic.
Carcinogenicity The product is formulated from non carcinogenic constituents.
Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
STOT - single exposure No specific effects after single exposure have been observed.
STOT - repeated exposure The following is found for the active ingredient flutriafol: organ: liver
 Repeated exposure to flutriafol may cause liver damage. The LOEL for this effect has been found to be approx. 150 mg flutriafol/kg bw/day in a 90-day feeding study in rats.
Aspiration hazard The product does not present an aspiration pneumonia hazard.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Birds:	Japanese quail: 14-day LD50: >2000 mg/kg bw (based on a similar formulation)	Daphnia:	Daphnia magna: 21-day NOEC: 0.1 mg/l 48-h EC50: 7.5 mg/l (based on a similar formulation)
Bees:	Apis mellifera: 48-h LD50, oral: > 100 µg/bee (based on a similar formulation)	Fish:	Rainbow trout: 96-h LC50: 7.9 mg/l (based on a similar formulation)
Algae:	Pseudokirchneriella subcapitata: 72-h EC50: 4.3 mg/l (based on a similar formulation)		

Persistence and degradability Flutriafol: Not readily biodegradable.
 The product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

Bioaccumulation See section 9 for n-octanol/water partition coefficient.

Mobility Flutriafol: Moderately mobile. Absorption depends on soil pH and organic matter content.

Other Adverse Effects No information available.

Section 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 Dispose of in accordance with local regulations.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

UN/ID no	3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s. (Flutriafol)
Hazard class	9
Packing Group	III
EmS No.	F-A, S-F

Marine Pollutant Yes

ICAO/IATA

UN/ID no 3082
 Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Flutriafol)
 Hazard class 9
 Packing Group III
 Marine Pollutant Yes

Section 15: REGULATORY INFORMATION

International Inventories

A food, food additive, drug, cosmetic, or device, when manufactured, processed or distributed in commerce for use as a food, food additive, drug, cosmetic, or device may not be subject to local notification requirements. Check local regulations for more information.

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Alcohols, C13-15 Branched and Linear, Ethoxylated 157627-86-6	X	X	X		X			

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Section 16: OTHER INFORMATION

Prepared By: FMC Corporation

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End of Safety Data Sheet