



The Chemical Company

Authority 480 SC

Registration No.
12-C-143-9

TRB Cert No. 13-15-C-63



HARMFUL IF SWALLOWED

Net contents:

5 LITRES

Composition:

	mass / volume
Sulfentrazone.....	480 g/l
inert ingredients	520 g/l

Chemical Group: **Triazolinone**

A PRE EMERGENCE HERBICIDE FOR THE CONTROL OF CERTAIN BROAD LEAF WEEDS AND YELLOW AND PURPLE NUTSEDEGE IN SOYABEANS, SUGARCANE AND FLUE CURED TOBACCO.

Registered by:

Pivotal Agro-Services (Pvt) Ltd.
Agriculture House, Adylinn Road, Marlborough
P.O. Box UA 414 Union Ave, Harare,
Telephone (263-4) 309800 to 309818, Fax 309849



Manufactured by

FMC Corporation, Wyoming, USA

Batch No.:

Date of Manufacture:

Expiry Date:

8108xxxxZW1044





TO CAUSE A HAZARD IN THE USE, STORAGE OR DISPOSAL OF THIS SUBSTANCE IS AN OFFENCE.

PRECAUTIONS:

1. Handle with care - avoid contact with liquid concentrate.
2. Mildly irritating to eyes. Avoid contact with skin, eyes or clothing. Wear appropriate protective clothing (i.e. goggles, face shield, overalls, gloves etc.) when using and/or handling this product.
3. Poisonous if swallowed, inhaled or absorbed through the skin.
4. KEEP OUT OF REACH OF CHILDREN.
5. KEEP APART FROM FOOD AND FOOD STUFFS.
6. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.
7. Wash exposed parts of the body with soap and water after use and before eating, drinking or smoking.
8. DO NOT CONTAMINATE PONDS, WATERWAYS AND DRAINS BY STORAGE OR DISPOSAL.
9. May be dangerous to wild animals, birds, fish and bees.
10. Store in original container in a cool dry place, tightly closed. KEEP UNDER LOCK AND KEY.
11. Clean applicator after use. Dispose of the washing water in a safe manner.
12. Triple rinse empty container and add the rinsate to the spray tank. Destroy the empty container by perforating or crushing and incinerate in a safe manner. DO NOT re use for any other purpose.

FIRST AID:

If swallowed	Drink two glasses of water. Do not induce vomiting. Get medical attention immediately.
If in eyes:	Flush eyes with large amounts of water. Get medical attention if irritation occurs.
If on skin	Wash skin with plenty of soap and water. Get medical attention if irritation occurs.
If inhaled	Remove subject to fresh air. Get medical attention if breathing is difficult.

SYMPTOMS OF POISONING: causes moderate eye and/or skin irritation.

NOTE TO PHYSICIAN: This product has low oral, dermal and inhalation toxicity. Contains toluene that can cause severe pneumonia if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. No known antidote. Treat symptomatically.





ENVIRONMENTAL HAZARDS

This product is toxic to some aquatic invertebrates. DO not apply directly on areas with surface water. Drift and run off may be hazardous to terrestrial and aquatic plants.

GROUND WATER: This product is known to leach through soil into ground water under certain conditions as a result of label recommended usage. Use of this product where soils are permeable particularly where the water table is shallow, may result in ground water contamination. Do not use on coarse soil classified as sandy with less than 1% organic matter.

SURFACE WATER: Sulfentrazone can contaminate surface water through spray drift. Under some conditions, Sulfentrazone can have a high potential of run off into surface water for several months after application. These include poorly draining soils or wet soils with visible slopes towards adjacent water bodies, frequently flooded areas, areas with very shallow water tables, areas within field canals that drain surface water etc.

WARRANTY:

This product and the recommendations concerning its use should give excellent results, but since the performance and effectiveness of chemicals can be greatly influenced by factors outside the manufacturer's control, the manufacturer and seller give no guarantee or warranty, expressed or implied, concerning the use and/or storage of this product and they assume no responsibility or liability of any nature whatsoever for any damage or injury or financial loss arising from the use thereof.

DIRECTION FOR USE: USE ONLY AS DIRECTED

AUTHORITY 480 SC should be applied uniformly over a good tilth before any weeds emerge using a sprayer with a flat fan **nozzles** in 200 litres of water per hectare. Rainfall (or irrigation) of at least 25mm is required to activate the herbicide. Avoid spray drift on to adjacent crops.

APPLICATION RATES

TOBACCO

TRB Cert No. 13-15-C-63

- Use only strong, well-grown, well- hardened seedlings and deep setting of the transplants.
- Ensure that the AUTHORITY 480SC is applied onto a well tilled, firm, and level bed free of depressions around the plant stations.





- Conditions that weaken transplants i.e. unfavourable soil pH, poor agronomic practices, excessive moisture, drought, disease will make the transplants more susceptible to herbicide damage.
- AUTHORITY 480SC should be applied within 4 days of transplanting onto a good weed-free tilth.
- Nozzles should be mounted over the inter row and direct the spray to include the top of the ridge and the base of the plants on either side so as to avoid contact with the growing point (heart) of the tobacco plants.
- Do not exceed 1.5 bars of spray pressure over tobacco
- Do not incorporate the AUTHORITY 480SC deeper than 5cms in to the soil solution either by irrigation or mechanical means. Do not apply more than 25 mm of irrigation within the first week of application.
- Do not perform tillage operations that can concentrate AUTHORITY 480SC into the bed as crop injury may result.
- Temporary stunting of the tobacco may occur if the seedlings are set too shallowly, or if heavy rain or too much irrigation immediately follows planting.
- Splashing of treated soil onto the tobacco leaves may cause localized but transitory necrosis.

% Clay	Application rate L/ha
0-20%	425 - 470 ml/ha
More than 20%	520 - 550 ml/ha

SOYABEANS

Ensure the soyabean seed is planted at least 3.5-4cm deep and avoid leaving furrows in the row after planting. Apply AUTHORITY 480SC after planting before the soyabeans and the weeds germinate

% Clay	Application rate ml/ha
0-15	Not recommended
15-35%	700 ml/ha
>35%	780 ml/ha





The performance of AUTHORITY480 SC may be affected by factors such as pH, soil moisture, soil texture and weed species.

SUGARCANE

Apply AUTHORITY 480SC as an overall spray in plant cane and as a directed inter row spray in ratoon cane directly after planting or cutting and before emergence of newly planted or ratoon sugarcane.

Apply the recommended rate of AUTHORITY 480SC evenly as an overall application in sufficient water (200-400 l water/ha) to ensure adequate coverage of the soil surface.

AUTHORITY 480SC when applied as post emergent in combination with a suitable surfactant/wetter (non-ionic; mineral oil; organosilicone) will control yellow nut sedge (*Cyperus esculentus*) from the 6 - 8 leaf growth stage.

	Coarse soils	Medium soils	Fine soils
	Sand, Loamy sand, Sandy loam	Sandy clay loam, Silt loam; Sandy clay; Silt	Silty clay loam, Silty clay, Clay loam, Clay
Pre-emergence	Not recommended	1.25 to 1.9 L/ha	1.5 to 1.9 L/ha
Pre- to early Post-emergence	Not recommended	1.25 L + An appropriate post emergent herbicide, in order to achieve knockdown of emerged weeds and residual control (Nut sedge must be 1 – 4 leaves, grasses 1 – 2 leaves and broadleaves 0 to 30mm.)	
Late Post-emergence	0.55 L/ha + surfactant or 0.55 L/ha + a grass herbicide partner		

MODE OF ACTION: AUTHORITY 480 SC is taken up by the roots and leaves, but it is mainly absorbed by the roots.

MIXING INSTRUCTIONS

Fill the spray tank half to three-quarters full with clean water and add the required amount of AUTHORITY 480SC to the spray tank while agitating. Fill the remainder of the tank with clean water. Continue agitating to keep the product in suspension. Ensure AUTHORITY 480SC is thoroughly mixed before adding any other compatible product. Do not keep the spray mixture for extended periods.





COMPATIBILITY

AUTHORITY 480 SC may be tank mixed with a registered pre-emergence grass control herbicide such as COMMAND and FRONTIER OPTIMA. It is however always recommended that the compatibility of AUTHORITY 480 SC with other herbicides has to be tested on a small scale, before used in spray mixtures.

CLEANING OF SPRAY TANK

Drain the tank completely of any spray mixture and flush with clean water plus ammonia. Then remove the nozzles and sieves and clean separately in a bucket.

ROTATIONAL CROPS

The following periods should be observed after the application of Authority.

CROP	MONTHS AFTER APPLICATION OF AUTHORITY 480 SC
Barley, Wheat	5 MONTHS
Maize, Rice, Sorghum,	10 MONTHS
Dry Beans, Ground nuts, Other cereals	12 MONTHS
Cotton, Sweet Corn.	18 MONTHS

WEEDS CONTROLLED BY AUTHORITY 480SC

SEDGES	BROADLEAF WEEDS	GRASSES
<i>Cyperus esculentus</i> <i>Cyperus rotundus</i>	<i>Acanthospermum hispidum</i> <i>Ageratum conyzoides</i> <i>Amaranthus spp.</i> <i>Chenopodium album</i> <i>Commelina benghalensis</i> <i>Galinsoga parviflora</i> <i>Nicandra physaloides</i> <i>Physalis angulata</i> <i>Richardia scabra</i> <i>Tagetes minuta</i> <i>Datura spp.</i>	Control of grasses of variable to poor



MATERIAL SAFETY DATA SHEET

AUTHORITY™ 480



MSDS Ref. No.: 122836-35-5-17

Date Approved: 04/07/2009

Revision No.: 2

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	AUTHORITY™ 480
PRODUCT CODE:	1466
ACTIVE INGREDIENT(S):	Sulfentrazone
CHEMICAL FAMILY:	Aryl Triazolinones
MOLECULAR FORMULA:	C ₁₁ H ₁₀ Cl ₂ F ₂ N ₄ O ₃ S(sulfentrazone)
SYNONYMS:	FMC 97285; F6285; CAS: N-[2,4-dichloro-5-[4-difluoromethyl]-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide; IUPAC: N-[2,4-dichloro-5-(4-difluoromethyl-3-methyl-5-oxo-4,5-dihydro-[1,2,4]triazol-1-yl)phenyl]methane sulfonamide
ALTERNATE PRODUCT NAME(S):	Authority™ 4 F; Boral™ 480 SC, Spartan™ 4F

MANUFACTURER

FMC CORPORATION
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (Email - General Information)

EMERGENCY TELEPHONE NUMBERS

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

For leak, fire, spill, or accident emergencies, call:
(800) 424-9300 (CHEMTREC - U.S.A. & Canada)
(703) 527-3887 (CHEMTREC - Collect - All Other Countries)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- Off-white liquid with a faint, alcoholic odor.
- Slightly combustible. May support combustion at elevated temperatures.
- Thermal decomposition and burning may form toxic by-products.
- For large exposures or fire, wear personal protective equipment.
- Slightly toxic to fish and aquatic organisms. Keep out of drains and water courses.

POTENTIAL HEALTH EFFECTS: Effects from overexposure result from inhaling this product. Symptoms of overexposure include convulsions, tremors, increased sensitivity to touch and sound, labored breathing, decreased locomotion, tearing, nasal discharge and incoordination.

MEDICAL CONDITIONS AGGRAVATED: None presently known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt.%	EC No.	EC Class
Sulfentrazone	122836-35-5	40	None	Not classified
Propylene Glycol	57-55-6	6	200-338-0	Not classified
Surfactant Blend		5	None	Not classified
Toluene	108-88-3	<3	203-625-9	F - Xn; R11-38-48/20-63-65-67

4. FIRST AID MEASURES

EYES: Flush with plenty of water. Get medical attention if irritation occurs and persists.

SKIN: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

INGESTION: Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

NOTES TO MEDICAL DOCTOR: This product has low oral, dermal and inhalation toxicity. It is slightly irritating to the skin and non-irritating to the eyes. Contains toluene which can produce a severe pneumonitis if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, CO₂ or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

FIRE / EXPLOSION HAZARDS: Slightly combustible. This material may support combustion at elevated temperatures.

FIRE FIGHTING PROCEDURES: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8, "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of the area.

Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel or pump waste into a drum and label contents for disposal.

To clean and neutralize spill area, tools and equipment, wash with a suitable solution of caustic or soda ash, and an appropriate alcohol (i.e., methanol, ethanol or isopropanol). Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary. Dispose of drummed waste according to the method outlined in Section 13, "Disposal Considerations".

7. HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Chemical Name	ACGIH	OSHA	Supplier
Toluene	50 ppm (TWA) (skin)	200 ppm (PEL) 300 ppm (STEL)	

ENGINEERING CONTROLS: Use local exhaust at all process locations where vapor or mist may be emitted. Ventilate all transport vehicles prior to unloading.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For splash, mist or spray exposure, wear chemical protective goggles or a face shield.

RESPIRATORY: For splash, mist or spray exposures wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

PROTECTIVE CLOTHING: Depending upon concentrations encountered, wear coveralls or long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as a PVC suit. Leather items - such as shoes, belts and watchbands - that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

GLOVES: Wear chemical protective gloves made of materials such as butyl rubber, nitrile or neoprene. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

WORK HYGIENIC PRACTICES: 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 at the end of the workday.

COMMENTS:

Personal protective recommendations for mixing or applying this product are prescribed on the product label. Information stated above provides useful, additional guidance for individuals whose use or handling of this product is not guided by the product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	Faint, alcoholic
APPEARANCE:	Off-white liquid
DENSITY / WEIGHT PER VOLUME:	1.206 g/cm ³
FLASH POINT:	> 94 °C (> 201 °F) (TCC)
MOLECULAR WEIGHT:	387.19 (sulfentrazone)
pH:	5.3 - 6.0 @ 20 °C
SOLUBILITY IN WATER:	Disperses
SPECIFIC GRAVITY:	1.206 @ 20 °C (water = 1)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Excessive heat and fire.
STABILITY:	Stable
POLYMERIZATION:	Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides, hydrogen chloride, hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Non-irritating

SKIN EFFECTS: Slightly irritating

DERMAL LD₅₀: > 2,000 mg/kg (rat)

ORAL LD₅₀: 2,084 mg/kg (rat)

INHALATION LC₅₀: > 2.72 mg/l (4 h) (rat) Maximum attainable concentration - zero mortality

ACUTE EFFECTS FROM OVEREXPOSURE: This product has low oral, dermal and inhalation toxicity. It is slightly irritating to the skin and non-irritating to the eyes. Signs of toxicity in laboratory animals included clonic convulsions, tremors, recumbency, splayed limbs and decreased locomotion. In humans, ingestion of large amounts of propylene glycol has resulted in symptoms of reversible central nervous system depression including stupor, rapid breathing and heartbeat, profuse sweating and seizures. Effects observed in laboratory animals after acute inhalation of toluene included mucous membrane irritation, motor incoordination, prostration, changes in respiratory rate, changes in serum and blood enzyme activities, elevated blood glucose and packed cell volume, decreased body weight and death. Vomiting after ingestion of this product may cause aspiration of toluene into the lungs, which may result in fatal pulmonary edema.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the formulation. Sulfentrazone was not carcinogenic in lifetime feeding studies with laboratory animals, nor was it found to be mutagenic in a battery of tests. In a reproduction study, sulfentrazone produced adverse effects on the growth and survival of the offspring, decreased male fertility and oligospermia at 25 mg/kg/day, and 35 mg/kg/day. Sulfentrazone was found to be fetotoxic in oral and dermal developmental toxicity studies; the fetal NOELS were 10 mg/kg/day and 100 mg/kg/day, respectively. At labeled use rates and practices of mixing and applying, expected exposure to farm workers is at least one hundred times lower than the doses that produced effects in laboratory animals. At labeled use rates and practices of mixing and applying, expected exposure to farm workers is at least one hundred times lower than the doses that produced effects in laboratory animals. Repeated overexposure to propylene glycol can produce central nervous system depression, hemolysis and minimal kidney damage. Chronic exposure to toluene may cause headaches, dizziness, loss of sensations or feelings (such as numbness), and liver and kidney damage. Inhalation of toluene vapors at high doses have also resulted in an increased incidence of malformations and decreased fetal weight in laboratory animals.

CARCINOGENICITY:

NTP:	Not listed
IARC:	Not listed
OSHA:	Not listed
OTHER:	Not Listed (ACGIH)

12. ECOLOGICAL INFORMATION

Unless otherwise indicated, the data presented below are based on the active ingredient.

ENVIRONMENTAL DATA: Sulfentrazone is stable in soil (half-life = 18 months). In water, sulfentrazone is stable to hydrolysis over the pH range of 5 to 9, however, it will readily undergo photolysis (half-life < 0.5 day). Sulfentrazone has a low affinity for organic matter ($K_{oc} = 43$), but is mobile only in soils with high sand content. The potential for sulfentrazone to bioaccumulate is very low, having a Log P_{ow} of 1.48, and a bioconcentration factor of 1.1 - 2.0.

ECOTOXICOLOGICAL INFORMATION: Sulfentrazone is slightly toxic to fish and aquatic arthropods, with LC_{50} values ranging from 60.4 mg/L to > 130 mg/L. Sulfentrazone has a very low order of toxicity to waterfowl (dietary $LC_{50} > 5620$ ppm) and upland game birds (oral $LD_{50} > 2,250$ mg/kg). Sulfentrazone:

Algae: 120 Hour $EC_{50} = 31 \mu\text{g/L}$ (Selenastrum)

Algae: 120 Hour $EC_{50} = 33 \mu\text{g/L}$ (Anabaena - Bluegreen Algae)

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

EMPTY CONTAINER: Non-returnable containers that held this material should be cleaned, prior to disposal, by triple rinsing. Containers which held this material may be cleaned by being triple-rinsed, and recycled, with the rinsate being incinerated. Do not cut or weld metal containers. Vapors that form may create an explosion hazard.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PACKAGING TYPE:	Non-Bulk
ADDITIONAL INFORMATION:	This material is not a hazardous material as defined by US Department of Transportation at 49 CFR Parts 100 through 185.
PACKAGING TYPE:	Bulk
PROPER SHIPPING NAME:	Environmentally hazardous substance, liquid, n.o.s.
TECHNICAL NAME(S):	Toluene
PRIMARY HAZARD CLASS / DIVISION:	9
UN/NA NUMBER:	UN 3082
PACKING GROUP:	III
LABEL(S):	9
PLACARD(S):	9
MARKING(S):	UN 3082
REPORTABLE QUANTITY (RQ):	Toluene
ADDITIONAL INFORMATION:	Toluene is in an "RQ" quantity when this material meets or exceeds 33,333 pounds (3313 gallons) per bulk package.

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

PACKAGING TYPE:	Non-Bulk
PROPER SHIPPING NAME:	Environmentally hazardous substance, liquid, n.o.s.
TECHNICAL NAME(S):	Sulfentrazone
PRIMARY HAZARD CLASS / DIVISION:	9
UN/NA NUMBER:	UN 3082
PACKING GROUP:	III
MARINE POLLUTANT:	Sulfentrazone

LABEL(S): 9
PLACARD(S): 9
MARKING(S): Environmentally hazardous substance,
liquid, n.o.s. (sulfentrazone), UN 3082 +
Marine Pollutant
ADDITIONAL INFORMATION: EmS Number: F-A, S-F

**ADR - EUROPEAN AGREEMENT CONCERNING THE
INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD**

PACKAGING TYPE: Non-Bulk
PROPER SHIPPING NAME: Environmentally hazardous substance,
liquid, n.o.s.
TECHNICAL NAME(S): Sulfentrazone
PRIMARY HAZARD CLASS / DIVISION: 9
CLASSIFICATION CODE: M6
UN/NA NUMBER: UN3082
PACKING GROUP: III
HAZARD IDENTIFICATION NUMBER: 90
MARINE POLLUTANT: Sulfentrazone
LABEL(S): 9
PLACARD(S): 9
MARKING(S): UN 3082 + Marine Pollutant

**INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) /
INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)**

PACKAGING TYPE: Non-Bulk
PROPER SHIPPING NAME: Environmentally hazardous substance,
liquid, n.o.s.
TECHNICAL NAME(S): Sulfentrazone
PRIMARY HAZARD CLASS / DIVISION: 9
UN/NA NUMBER: UN3082
PACKING GROUP: III
LABEL(S): 9
ADDITIONAL INFORMATION: Marks: Environmentally hazardous

3082 + Marine Pollutant

OTHER INFORMATION:

CANADIAN TRANSPORT (TDG):

ADDITIONAL INFORMATION: This material is not a dangerous good as defined by TDG Regulations.

HARMONIZED SYSTEM

Import to the U.S.A.: 3808.93.1500

Export from the U.S.A.: 3808.93.0000

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):**

Not listed

SECTION 311 HAZARD CATEGORIES (40 CFR 370):

Immediate, Delayed

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):

The Threshold Planning Quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs; however, this product contains the following ingredients with a TPQ of less than 10,000 lbs.:

None

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):

This product contains the following ingredients subject to Section 313 reporting requirements:

Toluene

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)**CERCLA DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):**

Listed

<u>Chemical Name</u>	<u>RQ</u>
Toluene	1,000 lb

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):

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

Hazard Classification / Division: D2A

HAZARD AND RISK PHRASE DESCRIPTIONS:

EC Symbols:	F	(Highly Flammable)
	Xi	(Irritant)
	Xn	(Harmful)
EC Risk Phrases:	R11	(Highly flammable)
	R38	(Irritating to skin)
	R48/20	(Harmful: danger of serious damage to health by prolonged exposure through inhalation)
	R63	(Possible risk of harm to the unborn child)
	R65	(Harmful: may cause lung damage if swallowed.)
	R67	(Vapors may cause drowsiness and dizziness.)

16. OTHER INFORMATION**NFPA**

Health	1
Flammability	1
Reactivity	0
Special	None

No special requirements

NFPA (National Fire Protection Association)

Degree of Hazard Code:

4 = Extreme

3 = High

2 = Moderate

1 = Slight

0 = Insignificant

REVISION SUMMARY:

This MSDS replaces Revision #2, dated March 27, 2009.

Changes in information are as follows:

Section 14 (Transport Information)

Section 16 (Other Information)

Spartan, Authority, Boral and FMC Logo - FMC Trademarks

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