



SAFETY DATA SHEET

Authority® 480 SC

SDS #: 1466-21-A
Revision date: 2021-06-09
Format: AP
Version 1

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Authority® 480 SC
Product Code(s) 1466-21-A
Active Ingredient(s) Sulfentrazone
Chemical Family Triazolinones
Recommended Use: Herbicide
Restrictions on Use: Use as recommended by the label.

Manufacturer/Supplier

FMC Agro Philippines Inc.
Unit 10-A SIX/Neo Building
5th Avenue cor. 26th Street
Bonifacio Global City
Taguig City
Philippines 1634
Telephone No: +63 (2) 79443400
Fax: +63 (2)-79443465

National Poison Control Center:

U.P. PGH, Padre Faura, Manila (+63) 2 8524 1078
East Avenue Medical Center, Quezon City (+63) 2 8928 0611
Southern Philippines Medical Center (+63) 82 227 2731

Emergency telephone

Medical Emergencies: 1 651 632 6793 (Collect)
For leak, fire, spill or accidents: +(63) 2-395-3308 (CHEMTREC)

Section 2: HAZARDS IDENTIFICATION

GHS Classification

Reproductive toxicity	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Label Elements



Signal Word:

Warning

Hazard Statements

H361 - Suspected of damaging fertility or the unborn child

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

Precautionary Statements - Response

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

P391 - Collect spillage

Precautionary Statements - Storage

P405 - Store locked up

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

Other Information

None known.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Mixture.

Chemical name	CAS-No	Weight %
Sulfentrazone	122836-35-5	40
Toluene	108-88-3	1-5

Section 4: FIRST AID MEASURES**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.

Skin Contact

Immediately flush with plenty of water while removing contaminated clothing and/or shoes, and thoroughly wash with soap and water. Get medical attention if irritation develops and persists.

Eye Contact

Immediately rinse eyes with much water or eyewash solution, occasionally opening eyelids, until no evidence of chemical remains. Remove contact lenses after a few minutes and rinse again. Get medical attention if irritation develops and persists.

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.

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

It may be helpful to show this safety data sheet to physician.
 Notes to physician: A specific antidote for exposure to this material is not known. Gastric lavage and/or the administration of activated charcoal can be considered. After decontamination, treatment should be directed at the control of symptoms and the clinical condition.

Section 5: FIRE FIGHTING MEASURES

Explosive properties	Not explosive.
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Avoid heavy hose streams.
Small Fire	Dry chemical. Carbon dioxide (CO ₂).
Large Fire	Water spray. Foam.
Specific Hazards Arising from the Chemical	The essential breakdown products are volatile, malodorous, toxic, irritant and inflammable compounds such as hydrogen chloride, hydrogen fluoride, nitrogen oxides, sulphur dioxide, carbon monoxide, carbon dioxide and various chlorinated and fluorinated organic compounds.
Hazardous Combustion Products	See Section 10.
Protective equipment and precautions for firefighters	Cool containers / tanks with water spray. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Use water spray to cool fire exposed surfaces and protect personnel. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Dike to prevent runoff. Wear self-contained breathing apparatus and protective suit.

Section 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.
Other	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
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	Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Clean and neutralize spill area, tools and equipment by washing with 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.

Section 7: HANDLING AND STORAGE

Handling	<p>In an industrial environment, avoid all contact with the product, if possible, using remotely controlled systems. Adequate ventilation or local exhaust ventilation is required. Exhaust gases must be filtered. For personal protection in this situation, see Section 8.</p> <p>Remove contaminated clothing and shoes. Wash thoroughly after handling. Use protective gloves made from nitrile or neoprene. Wash gloves with soap and water before reuse and check regularly for leaks. Do not dispose into the environment. Do not contaminate waterways when disposing of any water used to clean equipment. Collect all waste and residues from cleaning, and dispose of them as hazardous waste. See Section 13 for</p>
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disposal.

Storage

Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Packaging material

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Materials to avoid

Strong oxidizing agents, Strong acids, Strong bases.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Component	China	Japan	Korea	Australia	Taiwan
Toluene 108-88-3 (1-5)	TWA: 50 mg/m ³ STEL: 100 mg/m ³ S*	OEL: 50 ppm OEL: 188 mg/m ³ S* ISHL/ACL: 20 ppm	STEL: 150 ppm TWA: 50 ppm	STEL 150 ppm STEL 574 mg/m ³ TWA 50 ppm TWA 191 mg/m ³	S* STEL 125 ppm STEL 470 mg/m ³

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

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.

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.

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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

Appearance

Liquid Off-white

Odor

Low Alcohol

Color

Off-white

Odor threshold

No information available

pH

5.3-6.0 @ 20°C

Melting point/freezing point

No information available

Boiling Point/Range

> 94 °C / > 201 °F Tag Closed Cup

Flash point

No information available

Evaporation Rate

No information available

Flammability (solid, gas)**Flammability Limit in Air**

Upper flammability limit:

No information available

Lower flammability limit:

No information available

Vapor pressure

No information available.

Vapor density

No information available

Specific gravity	1.206 @ 20 °C (water = 1)
Water solubility	Soluble in water
Solubility(ies)	No data available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	Not explosive
Oxidizing properties	Non-oxidizing
Molecular weight	No data available
Relative density	10.07 lb/gal
Bulk density	No information available

Section 10: STABILITY AND REACTIVITY

Reactivity	None under normal use conditions
Stability	Stable under normal conditions.
Hazardous reactions	None under normal processing.
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	Carbon oxides (COx), Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride, Hydrogen fluoride.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Numerical measures of toxicity - Product Information

LD50 Oral	2084 mg/kg (rat)
LD50 Dermal	> 2000 mg/kg (rabbit)
LC50 Inhalation (dust)	> 2.72 mg/L 4 hr (rat) - Maximum attainable concentration (zero mortality)

Skin corrosion/irritation	Rabbit: Slightly irritating.
Serious eye damage/eye irritation	Rabbit: Non-irritating.
Sensitization	Guinea pig: Non-sensitizing.

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	There are no known carcinogenic chemicals in this product.
Reproductive toxicity	Sulfentrazone: The fetal no observable effect level was 10.0 mg/kg/day based upon decreased fetal body weights and delayed ossification in the 25 mg/kg/day group fetuses. Case studies on toluene exposure of pregnant women provide evidence of developmental toxicity and increased risk for late spontaneous abortions at inhalation dose level 88 ppm (330 mg/m ³). No specific effects after single exposure have been observed.
STOT - single exposure	The following was measured on the active ingredient sulfentrazone: Target organs: nervous system and development of offspring.
STOT - repeated exposure	LOAEL: 33 mg/kg bw/day in a 2 generation development study, based on decreased body weight of offspring.
Neurological effects	Sulfentrazone: Clinical signs of neurotoxicity in laboratory animals was observed at high dose levels.

Aspiration hazard The product does not present an aspiration pneumonia hazard.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Sulfentrazone (122836-35-5)				
Active Ingredient(s)	Duration	Species	Value	Units
	96 h LC50	Onchorhyncus mykiss	> 130	mg/L
	99 d NOAEC	Onchorhyncus mykiss	2.95	mg/L
	48 h EC50	Daphnia magna	60.4	mg/L
	21 d NOAEC	Daphnia magna	0.2	mg/L
	120 h EC50	Pseudokirchneriella subcapitata	0.031	mg/L
	120 h EC50	Navivula pelliculosa	0.042	mg/L
	14-day EC50	Lemna gibba (duckweed)	0.0288	mg/L
	14-d NOAEL	Lemna gibba (duckweed)	0.019	mg/L
	LD50 Oral	Northern bobwhite	>5620	ppm
	LD50 contact	Honey bees	> 25	µg/bee

Persistence and degradability Sulfentrazone: Persistent, Does not readily hydrolyze, Not readily biodegradable.

Bioaccumulation Sulfentrazone: The substance does not have a potential for bioconcentration.

Mobility Sulfentrazone: Mobile, Has potential to reach ground water.

Other Adverse Effects None known.

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 containers and packages Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions. Do not reuse or refill this container.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.(sulfentrazone)
Hazard class	9
Packing Group	III
EmS No.	F-A, S-F
Environmental Hazards	Sulfentrazone

ICAO/IATA

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.(sulfentrazone)
Hazard class	9
Packing Group	III
Environmental Hazards	Sulfentrazone

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)
Toluene 108-88-3	X	X	X	X	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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Revision note SDS sections updated.

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End of Safety Data Sheet