

SAFETY DATA SHEET

Issuing Date 07-Aug-2024

Revision Date 07-Aug-2024

Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name **TOTAL (R) BLUE**

Other means of identification

Product Code NA
CAS Number Mixture
Formula Not available
Synonyms Not available
EPA Registration Number 2749-637

Recommended use of the chemical and restrictions on use

Recommended Use Agriculture
Uses advised against Do not use where contact with food or drinking water is possible. Avoid prolonged contact with eyes, skin, and clothing.

Details of the supplier of the safety data sheet

Supplier Address ACETO LIFE SCIENCES, LLC
4 Tri Harbor Court
Port Washington, NY 11050-4661
Phone: (516) 627-6000
Fax: (516) 627-6093
Email: aceto@aceto.com

Emergency telephone number(s)

ChemTrec: 1-800-424-9300 Outside of the United States: 1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2A
Skin Sensitization	Category 1
Reproductive toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Emergency Overview

Signal Word
DANGER

Hazard statements

Harmful if swallowed
 Harmful if inhaled
 Causes serious eye irritation
 May cause an allergic skin reaction
 May damage fertility or the unborn child
 May cause damage to organs through prolonged or repeated exposure



Appearance
 Blue liquid

Physical State
 Liquid

Odor
 Characteristic

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Use only outdoors or in a well-ventilated area
 Contaminated work clothing should not be allowed out of the workplace
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 Specific treatment (see supplemental first aid instructions on this label)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present .
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None known

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Not available

Formula Not available

Chemical name	CAS No.	Weight-%	North American Hazard Indicator
Glufosinate Ammonium	77182-82-2	24.5	False
Other Ingredients	N/A	75.5	False

4. FIRST AID MEASURES

First Aid Measures

General Advice Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

Skin Contact Wash off immediately with plenty of water. Wash contaminated clothing before reuse. Consult a physician.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Consult a physician.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Consult a physician.

Self-Protection of the First Aider Use personal protective equipment as required. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Signs and Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide (CO₂). Water spray. Dry powder. Foam.

Unsuitable Extinguishing Media High volume water jet.

Hazardous Combustion Products Carbon oxides. Sulfur oxides.

Explosion Data Not available

Sensitivity to mechanical impact Not available.

Sensitivity to static discharge Not available.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full

protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental Precautions	Local authorities should be advised if significant spillages cannot be contained. Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

Methods and material for containment and cleaning up

Methods for Clean-up	Pick up and transfer to properly labelled containers.
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7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Use only in an area equipped with a safety shower. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation. Do not breathe vapours/dust. Avoid contact with eyes, skin and clothing. Avoid repeated exposure.
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Conditions for safe storage, including any incompatibilities

Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.
Incompatible Materials	Strong oxidizing agents. Strong acids. Bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glufosinate Ammonium 77182-82-2	-	-	-
Other Ingredients N/A	-	-	-

Appropriate engineering controls

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tight sealing safety goggles.
Skin and body protection	Use suitable eye protection and gloves.
Respiratory Protection	In case of insufficient ventilation, wear suitable respiratory equipment.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Blue liquid
Physical State	Liquid
Odor	Characteristic
Color	Blue
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6.6-7.8 @ 100% (23 C)	
Melting point / Freezing point	No Data Available	Literary Reference
Boiling point / boiling range	No information available	
Flash Point	> 93.3 °C	No information available
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air	No information available	
Upper flammability limit	No information available	
Lower flammability limit	Not available	
Vapor Pressure	No information available	
Vapor Density	Not available	
Specific Gravity	No information available	
Water Solubility	Miscible	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	Not available	
Autoignition temperature °C	No Data Available	Estimated
Decomposition temperature	No Data Available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	100-300 mPa.s @ 20 C	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC content	No information available
Liquid Density	1.15 g/cm ³ @ 20 C
Bulk density	No information available
Corrosion characteristics	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not applicable.
Chemical Stability	Stable under recommended storage conditions
Conditions to Avoid	Heat, flames and sparks. Exposure to moisture.
Incompatible Materials	Strong oxidizing agents. Strong acids. Bases.
Hazardous Decomposition Products	Carbon oxides. Sulfur oxides.
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glufosinate Ammonium	-	-	-
Other Ingredients	-	-	-

Oral LD50 > 300 - <2,000 mg/kg; (rat)
Dermal LD50 > 2,000 mg/kg; (rat)
Inhalation LC50 >2.1 mg/L (4 Hr) (Rat)

The following values are calculated based on chapter 3.1 of the GHS document

Information on likely routes of exposureSymptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Glufosinate Ammonium 77182-82-2	-	-	-	-
Other Ingredients N/A	A4	-	-	-

Serious eye damage/irritation Severe irritation.
Skin Corrosion/Irritation Slight irritant.
Sensitization Sensitizing.
Reproductive Effects No information available.
Mutagenic Effects No information available.
Developmental Effects No information available.
STOT - single exposure No information available.
STOT - Repeated Exposure No information available.
Aspiration Hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Avoid release to the environment

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Glufosinate Ammonium 77182-82-2	EC50 (72 h) 1,129 mg/l, Green Algae	LC50 (96 h) 461 mg/l, Pimephales Promelas	-	EC50 (48 h) >560 mg/l, Daphnia magna (water flea)

		(Fathead Minnow)		
Other Ingredients N/A	-	-	-	-

Persistence/Degradability No information available.

Bioaccumulation/Accumulation Does not bioaccumulate. BCF <1.

Mobility in Soil No information available.

Chemical name	log Pow =
Glufosinate Ammonium 77182-82-2	-
Other Ingredients N/A	-

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Contact waste disposal services. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Does not comply
Canada (DSL) Does not comply
EU (EINECS) Does not comply
EU (ELINCS) Does not comply
Japan (ENCS) Does not comply

China (IECSC)	Does not comply
Korea (KECL)	Does not comply
Philippines (PICCS)	Does not comply
Australia (AICS)	Does not comply
Mexico INV	Does not comply
Taiwan INV	Does not comply

Chemical name	U.S.A. (TSCA)	Canada (DSL)	EU (EINECS)	EU (ELINCS)	
Glufosinate Ammonium	-	-	X	-	
Other Ingredients	-	-	-	-	
Component	Japan (ENCS)	China (IECSC)	Korea (KECL)	Philippines (PICCS)	Australia (AICS)
-	-	-	-	-	-
-	-	-	-	-	-
Chemical name	Mexico INV		Taiwan INV		
Glufosinate Ammonium 77182-82-2	Present		Present		
Other Ingredients N/A	-		-		

In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA. This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required by Safety Data Sheets, and for workplace labels of non-pesticide chemicals.

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

VOC content

This Product does not contain any VOCs

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Glufosinate Ammonium 77182-82-2	-	-	-	-
Other Ingredients N/A	-	-	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	CERCLA/SARA Hazardous Substances	CERCLA/SARA RQ	RQ
Glufosinate Ammonium 77182-82-2	-	-	-
Other Ingredients N/A	-	-	-

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

This product does not contain any State Right-to-Know chemicals.

Chemical name	New Jersey	Massachusetts	Illinois	Rhode Island	Pennsylvania
Glufosinate Ammonium 77182-82-2	-	-	-	-	-
Other Ingredients N/A	-	-	-	-	-

U.S. EPA Label Information

EPA Pesticide Registration Number 2749-637

Canada

WHMIS Statement

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (SOR/2015-17) and the SDS contains all the information required by SOR/2015-17.

16. OTHER INFORMATION

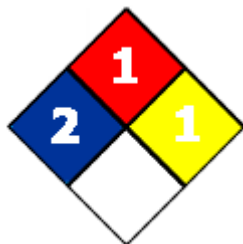
NFPA

Health 2

Flammability 1

Instability 1

Physical Hazard 0



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Not available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet