SAFETY DATA SHEET

Revision date 28-Nov-2023



Revision Number 1

1. Identification			
Product identifier			
Product Name	Acuvis		
Other means of identification			
Product Code(s)	89442-55-101563		
Synonyms	None		
Registration Number(s)	89442-55-101563		
Recommended use of the chemical and restrictions on use			
Recommended use	Herbicide		
Restrictions on use	Follow label instructions		
Details of the supplier of the safety data sheet			
<u>Company Address</u> Environmental Science U.S. LLC. 5000 Centregreen Way, Suite 400			

Cary, NC 27513

Emergency telephone number

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident:

 Call CHEMTREC Day or Night within USA and Canada: 1-800-424-9300, Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

For Non-Medical Emergencies Only:

• Call Day or Night within USA and Canada: 1-800-331-2867

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4

Hazards not otherwise classified (HNOC)

Not applicable

Label elements		
Warning		
Hazard statements Harmful if swallowed Harmful if inhaled		
Appearance opaque	Physical state Liquid	Odor mild bitter

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful in contact with skin. Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Active Ingredient
Triclopyr BEE	64700-56-7	28.62-30.39	Х
Dicamba-diglycoamine	104040-79-1	15.46-17.08	Х
Mestrione	104206-82-8	4.94-5.46	Х
Ethylene Glycol	107-21-1	1.90-2.10	
1-Octanol	111-87-5	0.45-0.55	
Other Ingredients	PROPRIETARY	>40.00	

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash skin with soap and water.	
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.	
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.	
Most important symptoms and effe	ects, both acute and delayed	
Symptoms	Coughing and/ or wheezing. Difficulty in breathing.	
Indication of any immediate medio	cal attention and special treatment needed	
Note to physicians	Treat symptomatically.	
5. Fire-fighting measures		
5. Fire-fighting measures Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Suitable Extinguishing Media	environment.	
Suitable Extinguishing Media	environment. CAUTION: Use of water spray when fighting fire may be inefficient.	
Suitable Extinguishing Media Large Fire Unsuitable extinguishing media Specific hazards arising from the	environment. CAUTION: Use of water spray when fighting fire may be inefficient. Do not scatter spilled material with high pressure water streams. No information available.	
Suitable Extinguishing Media Large Fire Unsuitable extinguishing media Specific hazards arising from the chemical Explosion data	environment. CAUTION: Use of water spray when fighting fire may be inefficient. Do not scatter spilled material with high pressure water streams. No information available. act None.	

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Avoid breathing vapors or mists. Use personal protective equipment as required.	
Other information	Refer to protective measures listed in Sections 7 and 8.	
Methods and material for containr	nent and cleaning up	
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers	

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. DO not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	
Ethylene Glycol 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m3 inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³	-	
Biological occupational exposure limits	This product, as supplied, do established by the region sp	pes not contain any hazardous m ecific regulatory bodies	aterials with biological limits	
Appropriate engineering control	<u>ols</u>			
Engineering controls	Showers Eyewash stations Ventilation systems			
Individual protection measures, such as personal protective equipment				
Eye/face protection	No special protective equipr	nent required.		
Skin and body protection	No special protective equipment required.			
Respiratory protection		No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required		
General hygiene considerations	Do not eat, drink or smoke when using this product.			

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	opaque
Color	dark yellow
Odor	mild Bitter
Odor threshold	No information available

<u>Property</u>	Values	Remarks • Method
рН	3.0 - 4.0	@ 1%
pH (as aqueous solution)		
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	> 110 °C / 230 °F	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	
Vapor density	No data available	
Relative density	No data available	
Water solubility	No data available	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature		
Kinematic viscosity	1312 cSt (24°C); 1136 cSt (42°C)	
Dynamic viscosity	No data available	
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC Content (%)	No information available	
Liquid Density	1.15 g/cm³ (9.60 pounds/gallon) at 24°C*	
Bulk density	No information available	
*Listed density is an approximate value and does	s not necessarily represent that of a specific batch	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Excessive heat.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	May be harmful in contact with skin.
Ingestion	Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

Oral LD50	1750 mg/kg
Dermal LD50	> 5,000 mg/kg
Inhalation LC50	> 2.38 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Mesotrione 104206-82-8	> 2000 mg/kg(Rat)	> 2000 mg/kg (Rat)	-
Ethylene Glycol 107-21-1	= 4700 mg/kg(Rat)	= 10600 mg/kg(Rat) = 9530 µL/kg(Rabbit)	-
1-Octanol 111-87-5	> 3200 mg/kg (Rat)	> 5 g/kg(Rabbit)	-

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

Skin corrosion/irritation	Slightly irritating to the skin.
Serious eye damage/eye irritation	Mildly irritating.
Respiratory or skin sensitization	Did not cause sensitization on laboratory animals.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target organ effects	Respiratory system, Eyes, Skin, Central nervous system.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethylene Glycol 107-21-1	EC50: 6500 - 13000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =41000mg/L (96h, Oncorhynchus mykiss) LC50: 14 - 18mL/L (96h, Oncorhynchus mykiss) LC50: =27540mg/L (96h, Lepomis macrochirus) LC50: =40761mg/L (96h, Oncorhynchus mykiss) LC50: 40000 - 60000mg/L (96h, Pimephales promelas) LC50: =16000mg/L (96h, Poecilia reticulata)	-	EC50: =46300mg/L (48h, Daphnia magna)
1-Octanol 111-87-5	EC50: =14mg/L (48h, Desmodesmus subspicatus)	LC50: 11.4 - 12.9mg/L (96h, Pimephales promelas) LC50: =17.68mg/L (96h, Oncorhynchus mykiss)	-	EC50: 15 - 26mg/L (24h, Daphnia magna)

Persistence and degradability
Bioaccumulation

No information available.

There is no data for this product.

Component Information

Chemical Name	Partition Coefficient
Ethylene Glycol 107-21-1	-1.93
1-Octanol 111-87-5	3.15

Other adverse effects

No information available.

13. Disposal considerations

Disposa	methods
Disposa	methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

DOT

Not regulated

15. Regulatory information

U.S. EPA Label Information

EPA Pesticide Registration Number	89442-55-101563
EPA Pesticide Label	CAUTION. Harmful if swallowed.

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AIIC	Does not comply

Legend:

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

DSL/NDSL - 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

AIIC - Australian Inventory of Industrial Chemicals

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Triclopyr BEE – 64700-56-7	1.0
Ethylene Glycol – 107-21-1	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Ethylene Glycol 107-21-1	5000 lb	-

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Ethylene Glycol – 107-21-1	Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water	-	-	Х
7732-18-5			

Triclopyr BEE 64700-56-7	Х	-	Х
Ethylene Glycol 107-21-1	Х	X	Х
1-Octanol 111-87-5	-	-	Х
6. Other information			

NFPA HMIS	Health hazards Health hazards		Flammability Flammability		Instability 0 Physical hazards 0	Special hazards - Personal protection X				
Key or legend to abbreviations and acronyms used in the safety data sheet										
Legend Section 8: Exposure controls/personal protection										
TWĂ	TWA (time-weighted a	/erage)	S	STEL	STEL (Short Te	erm Exposure Limit)				
Ceiling	Maximum limit value		*		Skin designation					
Revision date	28-	Nov-2023								

Revision Note

28-Nov-2023 No information available.

<u>Disclaimer</u>

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.

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This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

End of Safety Data Sheet