

SECTION 1: Product and company identification

Product name : Banish
 Use of the substance/mixture : Herbicide
 Product code : 0318
 Company : Total Solutions
 P.O. Box 240014
 Milwaukee, WI 53224 - USA
 T 800-743-6417
athea.com
 Contact: Technical Department
 Emergency number : Chemtrec: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS US classification
 STOT SE 1 H370
 STOT RE 2 H373

2.2. Label elements

GHS US labeling
 Hazard pictograms (GHS US) :



Signal word (GHS US) : GHS08
 : Danger
 Hazard statements (GHS US) : Causes damage to organs
 : May cause damage to organs through prolonged or repeated exposure
 Precautionary statements (GHS US) : Do not breathe dust/fume/gas/mist/vapors/spray.
 : Wash thoroughly after handling
 : Do not eat, drink or smoke when using this product.
 : If exposed: Call a poison center/doctor.
 : Get medical advice/attention if you feel unwell.
 : Specific treatment (see supplemental first aid instruction on this label).
 : Store locked up.
 : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
ethylene glycol	(CAS-No.) 107-21-1	1.0 - 5.0	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 STOT SE 1, H370 STOT RE 2, H373
methanol	(CAS-No.) 67-56-1	0.1-1.0	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Lact., H362 Repr. 1B, H360 STOT SE 1, H370

All hazardous chemicals, as determined by 29 CFR 1910.1200 have been listed. A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Get medical advice/attention if you feel unwell. Remove the victim into fresh air.
First-aid measures after skin contact	: Rinse skin with water/shower.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth with water. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: May cause damage to organs (liver) through prolonged or repeated exposure.
Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard.
Symptoms/effects after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/effects after ingestion	: Abdominal pain.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water. Carbon dioxide. Dry chemical powder.
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5.2. Special hazards arising from the substance or mixture

Reactivity	: Upon combustion: CO and CO ₂ are formed.
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5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Isolate from fire, if possible, without unnecessary risk.
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6.1.1. For non-emergency personnel

Protective equipment	: Protective goggles. Gloves. Protective clothing.
Emergency procedures	: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Contain released product, pump into suitable containers.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep container closed when not in use. Keep only in original container.
- Storage area : Meet the legal requirements. Store in a cool area. Store in a well-ventilated place.
- Special rules on packaging : meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethylene glycol (107-21-1)		
ACGIH	ACGIH OEL TWA [ppm]	25 ppm
ACGIH	ACGIH OEL STEL	10 mg/m ³
ACGIH	ACGIH OEL STEL [ppm]	50 ppm
ACGIH	Remark (ACGIH)	Kidney dam; URT & eye irr

methanol (67-56-1)		
ACGIH	ACGIH OEL TWA [ppm]	200 ppm
ACGIH	ACGIH OEL STEL [ppm]	250 ppm
ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea
OSHA	OSHA PEL (TWA) [1]	260 mg/m ³
OSHA	OSHA PEL (TWA) [2]	200 ppm

8.2. Exposure controls

- Personal protective equipment : Gloves. Safety glasses. Protective clothing. Use appropriate personal protective equipment when risk assessment indicates this is necessary.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Clear, amber liquid
- Odor : Mild odor
- Odor threshold : No data available
- pH : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : > 200 °F Closed Cup
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : No data available
- Explosion limits : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available
- Vapor pressure : No data available
- Relative density : No data available
- Relative vapor density at 20 °C : No data available
- Density : 1 g/ml
- Solubility : Soluble in water.
- Partition coefficient n-octanol/water (Log Pow) : No data available
- Partition coefficient n-octanol/water (Log Kow) : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available

Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO₂ are formed.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

ethylene glycol (107-21-1)	
LD50 oral rat	4700 mg/kg
LD50 dermal rabbit	10626 mg/kg
ATE CLP (oral)	500 mg/kg body weight
ATE CLP (dermal)	10626 mg/kg body weight

methanol (67-56-1)	
LD50 dermal rabbit	12800 mg/kg
ATE CLP (oral)	100 mg/kg body weight
ATE CLP (dermal)	300 mg/kg body weight
ATE CLP (vapors)	128.2 mg/l/4h
ATE CLP (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified.
STOT-single exposure : Causes damage to organs.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Symptoms/effects after inhalation : None under normal use.
Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard.
Symptoms/effects after eye contact : Direct contact with the eyes is likely to be irritating.
Symptoms/effects after ingestion : Abdominal pain.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container to comply with local/regional/national/international regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT : Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

EPA Registration Number: 10088-118

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 for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label

Caution: Harmful if swallowed. Causes moderate eye irritation. Do not get on skin or clothing. Avoid contact with eyes, skin or clothing.

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

lithium hydroxide	1310-65-2
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Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Bromacil Lithium Salt	53404-19-6	0.5 - 1.5%
ethylene glycol	107-21-1	1.0 - 5.0%
methanol	67-56-1	0.1-1.0%

ethylene glycol	(107-21-1)	CERCLA RQ5000 lb
methanol	(67-56-1)	CERCLA RQ5000 lb



WARNING

This product can expose you to Bromacil Lithium Salt, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

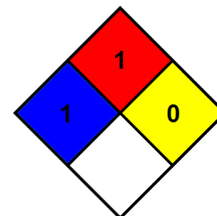
SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.