

1 Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name: EPTAM® 8-E****CAS Number:** EPTC (800 g/L) : 759-94-4**Registration number** PCP Registration No.:11284**1.2 Relevant identified uses of the substance or mixture and uses advised against****Sector of Use** Agriculture**Application of the substance / the mixture** Group 8 Herbicide**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Gowan Company

P.O. Box 5569

Yuma, Arizona 85366-5569

(800) 883-1844

Further information obtainable from: sds@gowanco.com**1.4 Emergency telephone number:**

Chemtrec® Emergency Telephone 24 - Hours: (Spills, leak or fire) Inside U.S. & Canada: (800) 424-9300

Outside the U.S. & Canada: +011 (703) 527-3887

For medical emergency (Prosar®): (888) 478-0798

2 Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

The product is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.**Additional information:****Physical Properties****Appearance:** Amber liquid**Odour:** Organosulphurous**Symptoms of Acute Exposure**

Causes eye, skin and respiratory passage irritation. Exposure to high vapour levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects. This product is a cholinesterase inhibitor.

Symptoms of cholinesterase inhibition may include salivation, sweating, headache, nausea, muscle twitching, tremors, poor coordination, blurred vision, tears, abdominal cramps, diarrhoea, and chest discomfort.

Medical Conditions Likely to be Aggravated by Exposure

None known.

Primary Routes of Exposure

Skin contact and inhalation.

2.2 Label elements**Labelling according to EU guidelines:** N/A**Information concerning particular hazards for human and environment:**

CAUTION / POISON

KEEP OUT OF REACH OF CHILDREN

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.

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· **vPvB:** Not applicable.

3 Composition/information on ingredients

3.2 Chemical characterization: Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

759-94-4	EPTC (ISO)	 Xn R22	80.0%
		 Acute Tox. 4, H302	(800 g/L)

4 First aid measures

4.1 Description of first aid measures

· **General information:**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact 1-888-478-0798 for emergency medical treatment information.

· **After inhalation:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call poison control center or doctor for further treatment advice.

· **After skin contact:**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

· **After eye contact:**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.
- Call a poison control center or doctor for treatment advice.

· **After swallowing:**

- 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.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Probable mucosal damage may contraindicate the use of gastric lavage.

This product contains EPTC, a thiocarbamate that inhibits cholinesterase. If symptoms of cholinesterase inhibition are present, atropine by injection is antidotal. Pralidoxime chloride (2-PAM) is NOT recommended as an antidote for this compound. Thiocarbamates have been shown in laboratory animals to cause a disulfiram-(Antabuse) type reaction in combination with alcohol.

5 Firefighting measures

5.1 Extinguishing media

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

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- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Keep unnecessary people away and isolate hazard area. Wear appropriate personal protective equipment described in Section 8.
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **6.3 Methods and material for containment and cleaning up:**
Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined under EXPOSURE CONTROLS/PERSONAL PROTECTION (Section 8). Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, or Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling**
Avoid contact with skin, eyes and clothing. Avoid breathing spray mist. Wash skin thoroughly with soap and water after use. Avoid contamination of food and feed. Do not contaminate irrigation water or water used for domestic purposes. Keep container closed when not in use
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:**
Keep container closed when not in use. Do not store near food, feed, seeds or fertilizers. Can be stored at temperatures as low as minus 45 °C.
 - **Information about storage in one common storage facility:** Store this product away from food or feed.
 - **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
 - **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:**
Wear coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, socks, chemical-resistant footwear and respirator during mixing, loading, application, clean-up and repair. The respirator must be equipped with a NIOSH/MSHA/BHSE-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH/MSHA/BHSE-approved canister approved for pesticides.

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When handling greater than 755 kilogram of active ingredient per day (i.e., treating over 110 ha at highest label rate of 6.8 kg. a.i. ha), a closed mixing and loading system is required. Handlers must wear coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, socks, and chemical-resistant footwear during application, clean-up and repair. A respirator is also required during application. The respirator must be equipped with a NIOSH/MSHA/BHSE-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH/MSHA/BHSE-approved canister approved for pesticides.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Safety glasses

Body protection:

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical resistant gloves
- Shoes plus socks

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:

Liquid

Colour:

Amber coloured

Odour:

Organosulphurous

Odour threshold:

Not determined.

pH-value:

Not determined.

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· Change in condition	
· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	127 °C (261 °F)
· Flash point:	> 97 °C (> 207 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density at 20 °C (68 °F):	0.9546 g/cm ³ (7.966 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· water:	Dispersible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Solvent content:	
· Organic solvents:	80.0 %
· Solids content:	8.0 %
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability** Stable under normal conditions
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** High temperatures
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Can decompose at high temperatures, forming toxic gases

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11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

Oral	LD50	1325 mg/kg (ratto)
Dermal	LD50	2750 mg/kg (rabbit)
Inhalative	LC50/4 h	10.3 mg/l (ratto)

Primary irritant effect:

- **on the skin:** Mild irritation
- **on the eye:** Moderately Irritating
- **Sensitization:** No sensitizing effects known.

12 Ecological information

12.1 Toxicity

- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

Other information:

TOXIC to wild mammals.

Toxic to aquatic organisms and terrestrial plants.

Ecotoxicological effects:

Remark:

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as clay).

Avoid application of this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

Other information:

Ecotoxicity data shown is for the active ingredient EPTC:

96-hr LC50 Cutthroat trout: >17 mg/L

96-hr LC50 Bluegill sunfish: >27 mg/L

96-hr LC50 Rainbow trout: >19 mg/L

Slightly toxic to fish.

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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13 Disposal considerations

13.1 Waste treatment methods

Recommendation

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

14 Transport information

<p>14.1 UN-Number</p> <p>DOT, TDG, ADN, IMDG, IATA</p>	Not regulated
<p>14.2 UN proper shipping name</p> <p>TDG, ADN, IMDG, IATA</p>	N/A
<p>14.3 Transport hazard class(es)</p> <p>14.3 TDG, ADN, IMDG, IATA</p> <p>Class</p>	N/A
<p>14.4 Packing group</p> <p>TDG, IMDG, IATA</p>	N/A
<p>14.5 Environmental hazards:</p> <p>Marine pollutant:</p>	No
<p>14.6 Special precautions for user</p>	Not applicable.
<p>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</p>	Not applicable.
<p>UN "Model Regulation":</p>	Not regulated

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations:

Other regulations, limitations and prohibitive regulations

SARA Title III Classification

Section 302/304: Not applicable

Section 311/312: Immediate (acute) health hazard

Delayed (chronic) health hazard

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Fire

Section 313 chemical(s): EPTC

Proposition 65

This product contains a chemical known to the state of California to cause Birth Defects or other reproductive harm.

CERCLA Reportable Quantity (RQ)

None.

RCRA Classification

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA Status

Exempt

DSL

Exempt from DSL

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.

R22 Harmful if swallowed.

· **Department issuing MSDS:** Supply Chain· **Contact:** sds@gowanco.com· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· **Sources** Eptam® is a registered trademark of Gowan Company, L.L.C.

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