

According to the UN GHS revision 8

Creation Date: July 11, 2026

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1. IDENTIFICATION

1.1 GHS Product identifier

Product name: Phenoxyethanol

Catalog Number: T20293

CAS Number: 122-99-6

1.2 Other means of identification

Other names: -

1.3 Recommended use of the chemical and restrictions on use

Identified uses: no data available

1.4 Supplier's details

Company: Targetmol Chemicals Inc.

Address: 34 Washington Street, Wellesley Hills, Massachusetts 02481 USA

Tel/Fax: (781) 999-4286

1.5 Emergency phone number

Emergency phone number: 781-999-4286

Service hours: Monday to Friday, 9am-5pm (Standard timezone: UTC/GMT -5 hours).

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Eye irritation, Category 2

2.2 GHS label elements, including precautionary statements

Pictogram(s):



Signal word: Warning

Hazard statement(s):
H302 Harmful if swallowed
H319 Causes serious eye irritation

Precautionary statement(s):

Prevention:

P264 Wash ... thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

Response:

P301+P317 IF SWALLOWED: Get medical help.
P330 Rinse mouth.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

none

Disposal:

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance

with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards which do not result in classification

no data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number
Phenoxyethanol	-	122-99-6	204-589-7

4. FIRST-AID MEASURES

4.1 Description of necessary first-aid measures

General advice

no data available

If inhaled

Fresh air, rest.

Following skin contact

Rinse and then wash skin with water and soap.

Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

Following ingestion

Rinse mouth. Give one or two glasses of water to drink. Refer for medical attention .

4.2 Most important symptoms/effects, acute and delayed

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. Poisons A and B

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

May cause moderate eye irritation and moderate corneal injury. Excessive exposure may cause skin irritation and hemolysis. (USCG, 1999)

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

To fight fire, use CO₂, dry chemical.

5.2 Specific hazards arising from the chemical

This chemical is combustible. (NTP, 1992)

5.3 Special protective actions for fire-fighters

Use water spray, powder, alcohol-resistant foam, carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

6.2 Environmental precautions

A DRUG SCREENING EXPERT

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

NO open flames. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Separated from strong oxidants.

Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

MAK: 5.7 mg/m³, 1 ppm; peak limitation category: I(1); pregnancy risk group: C

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear safety goggles.

Skin protection

Protective gloves. Protective clothing.

Respiratory protection

Use ventilation, local exhaust or breathing protection.

Thermal hazards

no data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Transparent
Odour	Faint aromatic odor
Melting point/freezing point	9.1 °C. Atm. press.:1 013 hPa.
Boiling point or initial boiling point and boiling range	244.3 °C.
Flammability	Combustible.
Lower and upper explosion limit/flammability limit	no data available

Flash point	126 °C. Atm. press.:101.23 kPa.
Auto-ignition temperature	475 °C. Atm. press.:> 997 - < 1 001 hPa.
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	dynamic viscosity (in mPa s) = 41. Temperature:19.8°C. Remarks:Temperature in the range 19.5-20.2 °C. Viscosity independent of the shear rate.;dynamic viscosity (in mPa s) = 19. Temperature:40.5°C. Remarks:Temperature in the range 40-41 °C. Viscosity independent of the shear rate.
Solubility	DMSO: 55 mg/mL (398.09 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
N-octanol-water partition coefficient	log Pow = 1.2. Temperature:23 °C.;log Pow = 1.2. Temperature:23 °C.;log Pow = 1.2. Temperature:23 °C.
Vapour pressure	0.01 hPa. Temperature:20 °C.;0.02 hPa. Temperature:25 °C.;0.18 hPa. Temperature:50 °C.
Density and/or relative density	1.11. Temperature:20 °C.
Relative vapour density	4.8 (vs air)
Particle characteristics	no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reacts with strong oxidants.

10.2 Chemical stability

Stable in presence of acids & alkalies.

10.3 Possibility of hazardous reactions

Combustible when exposed to heat or flame .ETHYLENE GLYCOL PHENYL ETHER may react violently with strong oxidizing agents. May generate flammable and/or toxic gases with alkali metals, nitrides, and other strong reducing agents. May initiate the polymerization of isocyanates and epoxides.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Can react vigorously with oxidizing materials.

10.6 Hazardous decomposition products

When heated to decomposition it emits acrid smoke and irritating fumes.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral: LD50 - rat (female) - 1 840 mg/kg bw.

Inhalation: LC50 - rat (male/female) - > 1 000 mg/m³ air (nominal).

Dermal: LD50 - rat (male/female) - 14 391 mg/kg bw.

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

The substance is irritating to the eyes, skin and respiratory tract. The substance may cause effects on the central nervous system and peripheral nervous system. This may result in impaired functions.

STOT-repeated exposure

The substance defats the skin, which may cause dryness or cracking. The substance may have effects on the central nervous system. This may result in impaired functions.

Aspiration hazard

A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20°C.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish: LC50 - Pimephales promelas - 344 mg/L - 96 h.

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna - > 500 mg/L - 48 h.

Toxicity to algae: EC50 - Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) - > 500 mg/L - 72 h.

Toxicity to microorganisms: EC20 - activated sludge of a predominantly domestic sewage - 620 mg/L - 30 min. Remarks:Respiration rate.

12.2 Persistence and degradability

AEROBIC: For 2-phenoxyethanol, theoretical BODs of 2% (5-day), 71% (10-day), and 80% (20-day) have been measured(1); a theoretical 20-day BOD of 50% indicates a compound will largely be removed during biological waste treatment(1).

12.3 Bioaccumulative potential

An estimated BCF of 1.5 was calculated in fish for 2-phenoxyethanol(SRC), using a log Kow of 1.16(1) and a regression-derived equation (2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

12.4 Mobility in soil

Using a structure estimation method based on molecular connectivity indices(1), the Koc of 2-phenoxyethanol can be estimated to be 15 (SRC). According to a classification scheme(2), this estimated Koc value suggests that 2-phenoxyethanol is expected to have very high mobility in soil.

12.5 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. TRANSPORT INFORMATION

14.1 UN Number

no data available

14.2 UN Proper Shipping Name

no data available

14.3 Transport hazard class(es)

no data available

14.4 Packing group, if applicable

no data available

14.5 Environmental hazards

no data available

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to IMO instruments

no data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.
EC Inventory	Listed.
United States Toxic Substances Control Act (TSCA) Inventory	Listed.
China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed.
Vietnam National Chemical Inventory	Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Listed.
Korea Existing Chemicals List (KECL)	Listed.

16. OTHER INFORMATION

Information on revision

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Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>

HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>

Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

Other Information

The relation between odour and the occupational exposure limit cannot be indicated.

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product. All products are for Research Use Only · Not For Human or Veterinary or Therapeutic Use