

2-phenoxyethanol 122-99-6 MSDS

Section 1 - Chemical Product MSDS Name: 2-Phenoxyethanol 99% Material Safety Data Sheet

Synonym: Ethylene Glycol Monophenylether; 1-Hydroxy-2-Phenoxyethane; Phenylmonoglycol Ether

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
122-99-6	2-Phenoxyethanol	99%	204-589-7

Hazard Symbols: XN

Risk Phrases: 22 36/38

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Harmful if swallowed. Irritating to eyes and skin.

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

Causes skin irritation.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause kidney failure. May be harmful if swallowed. Lesions may appear in the brain, lungs, liver, meninges, and heart.

Inhalation:

May cause respiratory tract irritation.

Chronic:

Chronic ingestion may cause effects similar to those of acute ingestion.

Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Do NOT allow victim to rub eyes or keep eyes closed.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician:

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam. Use agent most appropriate to extinguish fire. Cool containers with flooding quantities of water until well after fire is out.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 122-99-6: Germany: 20 ppm TWA; 110 mg/m³ TWA Germany: Skin absorber Netherlands: 20 ppm MAC; 110 mg/m³ MAC Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: colorless, oily

Odor: Faint aromatic odor

pH: Not available.

Vapor Pressure: < 1 mm Hg @25C

Viscosity: 29 mPas 20 deg C

Boiling Point: 245.2 deg C @ 760.00mm Hg

Freezing/Melting Point: 11 - 13 deg C

Autoignition Temperature: 430 deg C (806.00 deg F)

Flash Point: 130 deg C (266.00 deg F)

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature:

Solubility in water: 30 G/L WATER (20°C)

Specific Gravity/Density: 1.1050g/cm³

Molecular Formula: C₈H₁₀O₂

Molecular Weight: 138.17

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents - acid chlorides - acid anhydrides.

Hazardous Decomposition Products:

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 122-99-6: KM0350000 LD50/LC50:

CAS# 122-99-6: Draize test, rabbit, eye: 6 mg Moderate; Draize test, rabbit, eye: 250 ug/24H

Severe; Draize test, rabbit, skin: 500 mg/24H Mild; Oral, mouse: LD50 = 933 mg/kg; Oral, rat: LD50 = 1260 mg/kg; Skin, rabbit: LD50 = 5 mL/kg; Skin, rat: LD50 = 14422 mg/kg.

Carcinogenicity:

2-Phenoxyethanol - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fish toxicity: LC50 (96 hr) fathead minnow 345 mg/l Invertebrate toxicity: LC50 (5 min)

Photobacterium phosphoreum 32.4 ppm Microtox test.

[The Dictionary of Substances and their Effects, 1992]

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately
with plenty of water and seek medical advice.

WGK (Water Danger/Protection)

CAS# 122-99-6: 1

Canada

CAS# 122-99-6 is listed on Canada's DSL List.

CAS# 122-99-6 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 122-99-6 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A