

ETHYLENE GLYCOL, EXTRA PURE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: ETHYLENE GLYCOL, EXTRA PURE

Product Code: 2940

CAS#: 107-21-1

Chemical Formula: C₂H₆O₂

Molecular Formula: 62.07g/mol

Formula Weight: NA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Synonyms: 1, 2-Ethanediol

Formula: C₂H₆O₂

Molecular Weight: 62.07g/mol

CAS-No.: 107-21-1

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302 Harmful if swallowed

Specific target organ toxicity - repeated exposure, Oral (Category 2), Kidney, H373 May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Other hazards:

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact: Flush eyes with water as a precaution.

Skin Contact: Wash off with soap and plenty of water. Consult a physician.

Serious Skin Contact: Not available

Serious Inhalation: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Serious Ingestion: Not available

Most important symptoms and effects, both acute and delay no data available

Indication of any immediate medical attention and special treatment needed no data available

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture no data available

Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapor's, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s) A part from the uses no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Personal protective equipment

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	Form	: Clear colorless liquid.
Odour		: Not available
Taste		: Not available
Molecular Weight		: Not available
Colour		: Not available
pH		: Not available
Boiling Point		: Not available
Melting Point		: Not available
Critical Temperature		: Not available
Specific Density		: Not Available
Vapor Pressure		: Not Available
Vapor Density		: Not available
Volatility		: Not Available
Odor Threshold		: Not Available
Water/Oil Dist. Coeff.		: Not Available
Ionicity (in Water)		: Not Available
Dispersion Properties		: Not Available
Solubility		: Not available



SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions

Risk of explosion with: Aluminum, perchloric acid

Risk of ignition or formation of inflammable gases or vapours with: chromyl chloride, Strong oxidizing agents, chlorates, Peroxides, potassium permanganate,

Exothermic reaction with: chlorosulfonic acid, Sodium hydroxide, fuming sulfuric acid, sulfuric acid

Conditions to avoid Strong heating.

Incompatible materials various plastics, Strong oxidizing agents

Hazardous decomposition products no data available

Other decomposition products no data available

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral - 500,1 mg/kg Oral: (Regulation (EC) No 1272/2008, Annex VI)

LC50 Inhalation - Rat - male and female - 6 h - > 2,5 mg/l - aerosol

Remarks: (ECHA)

LD50 Dermal - Mouse - male and female - > 3.500 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation:

Skin - Rabbit

Result: No skin irritation - 20 h Remarks: (ECHA)

Serious eye damage/eye irritation:

Eyes - Rabbit

Result: No eye irritation - 24 h Remarks: (ECHA)

Respiratory or skin sensitization:

Maximization Test - Guinea pig

Result: negative (OECD Test Guideline 406)

Germ cell mutagenicity:

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: dominant lethal test

Species: Rat

Application Route: Oral

Result: negative

Carcinogenicity:

This product is or contains a component that is probably not carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity:

Laboratory experiments have shown teratogenic effects. Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity: no data available

Specific target organ toxicity - repeated exposure

Oral - May cause damage to organs through prolonged or repeated exposure. – Kidney

Aspiration hazard no data available



SECTION 12: ECOLOGICAL INFORMATION

Toxicity no data available

Persistence and degradability no data available

Bio-accumulative potential Does not bioaccumulate.

Mobility in soil no data available

Results of PBT and vPvB assessment PBT/vPvB assessment This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects no data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID: 3082

IMDG: 3082

IATA: 3082

UN proper shipping name

ADR/RID: ETHYLENE GLYCOL

IMDG: ETHYLENE GLYCOL

IATA: ethylene glycol

Transport hazard class(es):

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

Packaging group:

ADR/RID: III

IMDG: III

IATA: III

Environmental hazards:

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

SECTION 15: OTHER REGULATORY INFORMATION

Regulatory information: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements

H301 Toxic if swallowed.

H373 May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

LD50 Oral - 500,1 mg/kg Oral

LC50 Inhalation - Rat - male and female - 6 h - > 2,5 mg/l - aerosol

LD50 Dermal - Mouse - male and female - > 3.500 mg/kg

Other Special Considerations: Not available.



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