SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Trade name: Ethylene Glycol
Brand: DIYChemicals, Chemboys

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Industrial or Commercial Use only.
Uses advised against: All other uses.

1.3 Details of the supplier of the Safety Data Sheet

Chemboys LLC
212 Industrial Place,
Liberty, TX 77575,
USA

Phone: (855) 243-6722
E-mail: info@chemboys.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to OSHA Hazardous Communication Standard 29 CFR 1910.1200.

Acute toxicity (oral), category 4
Specific target organ toxicity -single exposure, category 3

2.2 Label elements

Labelling according to OSHA Hazardous Communication Standard 29 CFR 1910.1200:

Signal word: Warning

Hazard statements:

H302 Harmful if swallowed.
H336 May cause drowsiness or dizziness.

Precautionary statements:

P221 Take any precaution to avoid mixing with combustibles.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

2.3 Other hazards
None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture meeting the criteria for classification in accordance with OSHA Hazardous Communication Standard 29 CFR 1910.1200.

Ingredients:

Name	CAS No.	GHS classification	% (w/v)
Ethylene glycol	107-21-1	Acute Tox. 4, H302 STOT SE 3, H336	>99

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Following inhalation: If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Following skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shows. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Following eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Following ingestion: If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. Rinse mouth.

Protection of first aider: Not applicable.

4.2 Most important symptoms and effects

Symptoms: The known symptoms and effects are described in section 2.2 of this SDS.

Risks: Untreated symptoms may result in additional health risks.

4.3 Indication of any immediate medical and special treatment
The physician may contact the national poison centre for advice.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable extinguishing media: No data available.

5.2 Specific hazards arising from mixture
Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

5.3 Advice for fire fighters

Special protective equipment for firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

5.4 Other information
No other information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 NOTES FOR NON-EMERGENCY PERSONNEL: Ensure adequate ventilation. Use personal protective.

6.2 ENVIRONMENTAL PRECAUTIONS: Should not be released into the environment. See Section 12 for additional Ecological Information.

Notes for those trained to participate in an emergency:

6.3 ACCIDENTAL RELEASE MEASURES: Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not breathe mist/vapors/spray. Avoid contact with skin, eyes or clothing.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Incompatible Materials. Strong oxidizing agents. Strong acids. Strong bases. Aldehydes.

Incompatible materials: See section 10.

7.3 Specific end uses
See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Relevant DNELs and other threshold levels

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	35 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
DNEL	106 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects

Environmental values

Relevant PNECs and other threshold levels

End-point	Threshold level	Organism	Environmental com-partment	Exposure time
PNEC	10 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
PNEC	1 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
PNEC	199,5 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
PNEC	37 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
PNEC	3,7 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
PNEC	1,53 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Engineering controls:
Ensure adequate ventilation, especially in confined areas. Ensure that eye wash stations and safety showers are close to the workstation location.

Personal Protective equipment:

Hand: Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due

to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

Body protection: Appropriate protective clothing should be worn to prevent skin contact.

Eye: Wear safety glasses as minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Respiratory: Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

Other measures: No statement available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	No data available
pH:	6 – 7.5
Melting point/range:	-14 – -12 °C at 1.013 hPa
Boiling point/range:	197 – 198 °C at 1.013 hPa
Flash point:	111 °C at 1.013 hPa
Evaporation rate:	No data available
Flammability:	this material is combustible, but will not ignite readily
Upper/lower flammability or explosive limits:	3,2 vol% (LEL) - 43 vol% (UEL)
Vapor pressure:	0.12 hPa at 25 °C
Vapor density:	No data available
Relative Density:	1,11 g/cm³ at 20 °C
Solubility(ies):	1.000 g/l at 20 °C (water)
Partition coefficient (n-octanol/water):	-1,36
Auto-ignition temperature:	412 °C at 1.013 hPa
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability
Hygroscopic.

10.3 Possibility of hazardous reactions
Hazardous polymerization does not occur.

10.4 Conditions to avoid
Incompatible products. Excess heat. Exposure to moist air or water.

10.5 Incompatible materials
Strong oxidizing agents, Strong acids, Strong bases, Aldehydes.

10.6 Hazardous decomposition products
Carbon monoxide (CO), Carbon dioxide (CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

General information:
This product does not contain known human carcinogens.

11.1 Information on toxicological effects

Acute Toxicity:
Harmful if swallowed.

Skin corrosion/irritation:
No statements available for any of the ingredients.

Serious eye damage/irritation:
No statements available for any of the ingredients.

Respiratory or skin sensitization:
No statements available for any of the ingredients.

Germ cell mutagenicity:
No statements available for any of the ingredients.

Carcinogenicity:
This product does not contain known human carcinogens.

Reproductive toxicity:
No statements available for any of the ingredients.

STOT – single exposure:
May cause drowsiness or dizziness.

STOT – repeated exposure:
No statements available for any of the ingredients.

Aspiration hazard:

No statements available for any of the ingredients.

Likely route(s) of exposure:
Skin exposure and eye exposure are the most likely to occur. Accidental ingestion is also possible.

SECTION 12: ECOLOGICAL INFORMATION

General information:
No statements available for any of the ingredients.

12.1 Toxicity
No statements available for any of the ingredients.

12.2 Persistence and degradability

Physical- and photochemical elimination:
No statements available for any of the ingredients.

Biodegradation:
No statements available for any of the ingredients.

12.3 Bioaccumulative potential
No statements available for any of the ingredients.

12.4 Mobility in soil

Known/Predicted environmental distribution:
No statements available for any of the ingredients.

Surface tension:
No statements available for any of the ingredients.

Adsorption/Desorption:
No statements available for any of the ingredients.

12.5 Results of PBT and vPvB assessment
This product does not contain components which are considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No statements available for any of the ingredients.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product:
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts

261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Waste material:
Dispose according to Federal, State, Provincial and Local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
ADR/RID/IDMG/IATA: Non-regulated

14.2 UN proper shipping name
ADR/RID/IDMG/IATA: Non-regulated

14.3 Transport hazard class(es)
ADR/RID/IDMG/IATA: Non-regulated

14.4 Packing group
ADR/RID/IDMG/IATA: Non-regulated

14.5 Environmental hazards
ADR/RID/IDMG/IATA: Non-regulated

14.6 Special precautions for user
No statements available.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable, as product is not shipped in bulk.

SECTION 15: REGULATORY INFORMATION

International Inventories
TSCA: Complies
DSL: All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List.

US Federal Regulations
SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Acute health hazard: No
Chronic Health Hazard: No
Fire hazard: No
Sudden release of pressure hazard: No
Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canada
WHMIS Hazard Class
Not determined.

SECTION 16: OTHER INFORMATION

Further information
The information presented in this Safety Data Sheet (SDS) is accurate to the best of our knowledge at the date of publication. The information given within the SDS is meant solely as a guide for safe handling, use, transportation, processing, storage, release and disposal. In no means can the information within the SDS be considered as a warranty or specification for quality.