POLYETHYLENE GLYCOL

SECTION 1: PRODUCT IDENTIFICATION

Product Name: POLYETHYLENE GLYCOL
Product Code: CM 23,555
CAS#: 107-21-1
Synonym: 1,2-Ethanediol
Chemical Name: Not available
Chemical formula: $C_2H_6O_2$
Molecular formula: 62.07

Chemical Formula: KCl

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:
Name: POLYETHYLENE GLYCOL
Toxicological Data on Ingredients: Not applicable
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SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture:
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008
Acute toxicity, Oral (Category 4), H302
Specific target organ toxicity - repeated exposure, Oral (Category 2), Kidney, H373

SECTION 4: FIRST AID MEASURES

Eye Contact
Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used.
Skin Contact
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Serious skin contact
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration.
Serious Inhalation
Not Available.
Ingestion
Never give anything by mouth to an unconscious person. Rinse mouth with water.
Serious Ingestion
Not available

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture

Carbon oxides
Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
Further information
No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the Contaminated surface and allow evacuating through the sanitary system.

SECTION 7: HANDLING AND STORAGE

Precautions:
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist..
Storage conditions
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place. Hygroscopic.
Storage class
Storage class (TRGS 510): 10: Combustible liquids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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.
Respiratory protection Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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

SECTION 9: PHYSICAL ANDCHEMICAL PROPERTIES

Physicalstate and appearance Form	:liquid
Odour	:Not available
Taste	:Not available
Molecular Weight	:Not available
Colour	:Colourless
pH	:Not available

Boiling Point	:Not available
MeltingPoint	:Not available
CriticalTemperature	: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	:Soluble in water.

SECTION 10: STABILITYAND REACTIVITY DATA

Stability: Stable under recommended storage conditions.
Instability Temperature: Not available.
Conditions of Instability: Not available
Incompatibility with various substances: Strong acids, Strong oxidizing agents, Strong bases, Aldehydes, Aluminum
Corrosivity: Non-corrosive in presence of glass.
Special Remarks on Reactivity: Not available.
Special Remarks on Corrosivity: Not available.
Polymerization: Not available.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Ingestion.
Toxicity to Animals:
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
LD50 Dermal - Mouse - male and female - > 3.500 mg/kg Chronic Effects on Humans: Not available.
Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans:

Not available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - > 72.860 mg/l - 96 h
Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
and other aquatic
invertebrates
Toxicity to algae IC5 - Scenedesmus quadricauda (Green algae) - > 10.000 mg/l - 7d
Toxicity to bacteria static test EC20 - activated sludge - > 1.995 mg/l - 30 min
Persistence and degradability
Biodegradability aerobic - Exposure time 10 d
Result: 90 - 100 % - Readily biodegradable.

Biochemical Oxygen Demand (BOD)	780 mg/g
Chemical Oxygen Demand (COD)	1.190 mg/g
Theoretical oxygen	

Demand 1.290 mg/g
Ratio BOD/ThBOD 60 %

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: IMDG: IATA:
UN proper shipping name
ADR/RID:
IMDG:
IATA:
Transport hazard class (es):
ADR/RID: IMDG: IATA:
Packaging group:
ADR/RID: IMDG: IATA:
Environmental hazards:
ADR/RID: IMDG Marine pollutant: IATA:

SECTION 15: OTHER REGULATORY INFORMATION

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
A Chemical Safety Assessment has been carried out for thissubstance.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.
H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
Other Special Considerations: Not available.
The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user‘s obligation to investigate and determine the suitability of the information for their particular purpose.