

#### 1. IDENTIFICATION

Product Name Polyethylene glycol PEG400

Other Names Ethylene glycol, homopolymer; Ethylene oxide, homopolymer; Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-;

Polyoxyethylene ether

**Uses** Solubilising agent, Moisturiser.

Chemical FamilyNo Data AvailableChemical Formula(C2H4O)nH2OChemical NamePolyethylene glycolProduct DescriptionNo Data Available

### Contact Details of the Supplier of this Safety Data Sheet

 Organisation
 Location
 Telephone

 Redox Ltd
 2 Swettenham Road
 +61-2-97333000

Minto NSW 2566 Australia

Redox Ltd 11 Mayo Road

Wiri Auckland 2104 New Zealand

Redox Inc. 3960 Paramount Boulevard

Suite 107

Lakewood CA 90712

USA

Redox Chemicals Sdn Bhd Level 2, No. 8, Jalan Sapir 33/7

Seksyen 33, Shah Alam Premier Industrial Park

40400 Shah Alam Sengalor, Malaysia

# **Emergency Contact Details**

For emergencies only; DO NOT contact these companies for general product advice.

Organisation Location Telephone Poisons Information Centre Westmead NSW 1800-251525 131126 Chemcall Australia 1800-127406 +64-4-9179888 Chemcall Malaysia +64-4-9179888 Chemcall New Zealand 0800-243622 +64-4-9179888

National Poisons Centre New Zealand 0800-764766

CHEMTREC USA & Canada 1-800-424-9300 CN723420

+1-703-527-3887

+64-9-2506222

+1-424-675-3200

+60-3-5614-2111

#### 2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Not Scheduled

Phone Fax E-mail Web



#### **Globally Harmonised System**

Hazard Classification NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Signal Word None

### **National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods

by Road & Rail (ADG Code)

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Polyethylene glycol	(C2H4O)nH2O	25322-68-3	>99 - 100 %

#### 4. FIRST AID MEASURES

#### Description of necessary measures according to routes of exposure

**Swallowed** IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Call a Poison Centre or

doctor/physician for advice.

**Eye** IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting

the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye

irritation persists, get medical advice/attention.

**Skin** IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation

occurs, get medical advice/attention.

**Inhaled** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms

persist, get medical advice/attention. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is

difficult.

Advice to Doctor Treat symptomatically.

Exposure

Medical Conditions Aggravated by No information available.

### **5. FIRE FIGHTING MEASURES**

**General Measures** If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.

Flammability Conditions Combustible liquid; May burn but does not ignite readily.

\*Flame might be invisible in daylight.

**Extinguishing Media**Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction.

Fire and Explosion Hazard Containers may explode when heated.

Fire may produce irritating and/or toxic fumes, including oxides of Carbon.

**Hazardous Products of** 

Combustion

Special Fire Fighting Instructions Contain runoff from fire control or dilution water - Runoff may pollute waterways.

Personal Protective Equipment Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only

provide limited protection.

Flash Point >250 °C [Closed cup]
Lower Explosion Limit No Data Available
Upper Explosion Limit No Data Available
Auto Ignition Temperature No Data Available
Hazchem Code No Data Available

#### **6. ACCIDENTAL RELEASE MEASURES**

General Response Procedure Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames). Do not touch or walk

through spilled material. Avoid breathing vapours and contact with eyes, skin and clothing.

Clean Up Procedures Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION

13).

**Containment** Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas.

**Decontamination** No information available.

**Environmental Precautionary** 

Measures

Prevent entry into drains and waterways.

**Evacuation Criteria** Spill or leak area should be isolated immediately. Keep unauthorised personnel away.

Personal Precautionary Measures Wear protective equipment (see SECTION 8).

\*Persons not wearing protective equipment and clothing should be restricted from areas of spills or leaks until cleanup

has been completed.

#### 7. HANDLING AND STORAGE

Handling Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure

adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment

as required (see SECTION 8).

Storage Storage Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers securely sealed - Check regularly for

leaks. Protect containers against physical damage. Keep away from heat and sources of ignition - No smoking. Keep

away from foodstuffs and incompatible materials (see SECTION 10).

**Container** Keep in the original container.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**General** No value assigned for this specific material by Safe Work Australia.

Exposure LimitsNo Data AvailableBiological LimitsNo information available.Engineering MeasuresOperate in well-ventilated area.

**Personal Protection Equipment** - Respiratory protection: Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists.

Recommended: Organic vapour respirator (refer to AS/NZS 1715 & 1716).

- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses or goggles.

- Hand protection: Handle with gloves. Recommended: Rubber gloves.
- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Protective working clothes and safety shoes.

**Special Hazards Precaustions** 

No information available.

**Work Hygienic Practices** 

Do not eat, drink or smoke when using this product. Wash hands before break and at the end of work. Immediately remove all soiled and contaminated clothing. Keep work environment clean.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State** Liquid **Appearance** Clear liquid

Odour No information available. Colour No information available.

pН 5 - 7 (1% aq) Vapour Pressure No Data Available

**Relative Vapour Density**  $>1 \Delta ir = 1$ 

**Boiling Point** No Data Available **Melting Point** No Data Available **Freezing Point** No Data Available

Solubility Soluble in water (>100 g/100 ml)

**Specific Gravity** 1.110 - 1.130

**Flash Point** >250 °C [Closed cup] **Auto Ignition Temp** No Data Available **Evaporation Rate** No Data Available **Bulk Density** No Data Available **Corrosion Rate** No Data Available **Decomposition Temperature** No Data Available Density No Data Available **Specific Heat** No Data Available **Molecular Weight** No Data Available **Net Propellant Weight** No Data Available **Octanol Water Coefficient** No Data Available **Particle Size** No Data Available **Partition Coefficient** No Data Available **Saturated Vapour Concentration** No Data Available **Vapour Temperature** No Data Available

**Additional Characteristics** No information available.

**Potential for Dust Explosion** Not applicable.

**Fast or Intensely Burning** 

Characteristics

Viscosity

**Volatile Percent** 

**VOC Volume** 

No information available.

No Data Available

No Data Available

No Data Available

Flame Propagation or Burning

**Rate of Solid Materials** 

No information available.

**Non-Flammables That Could** Contribute Unusual Hazards to a No information available.

**Fire** 

Properties That May Initiate or Contribute to Fire Intensity

Combustible liquid; May burn but does not ignite readily.

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Reactions That Release Gases or Fire/th

**Vapours** 

Fire/thermal decomposition may produce irritating and/or toxic fumes, including oxides of Carbon.

Release of Invisible Flammable

Vapours and Gases

No information available.

\*Flame might be invisible in daylight.

#### 10. STABILITY AND REACTIVITY

**General Information** No dangerous reactions known.

Chemical StabilityProduct is stable under normal conditions.Conditions to AvoidKeep away from heat and sources of ignition.

Materials to Avoid Incompatible/reactive with strong oxidising agents, strong acids.

**Hazardous Decomposition** 

**Products** 

Fire/thermal decomposition may produce irritating and/or toxic fumes, including oxides of Carbon.

Hazardous Polymerisation No information available.

## 11. TOXICOLOGICAL INFORMATION

**General Information** Information on possible routes of exposure:

- Ingestion: May cause gastrointestinal discomfort if consumed in large amounts.

Eye contact: May cause irritation.Skin contact: May cause irritation.

 $\hbox{- Inhalation: Inhalation of vapours in high concentration may cause irritation of respiratory system.}\\$ 

Chronic effects: No information available.

Carcinogen Category None

### 12. ECOLOGICAL INFORMATION

EcotoxicityNo information available.Persistence/DegradabilityNo information available.MobilityNo information available.

**Environmental Fate** Prevent entry into drains and waterways,

Bioaccumulation Potential No information available.

**Environmental Impact** No Data Available

## 13. DISPOSAL CONSIDERATIONS

**General Information** Dispose of contents/container in accordance with local/regional/national regulations.

**Special Precautions for Land Fill** No information available.

#### 14. TRANSPORT INFORMATION

# Land Transport (Australia)

ADG Code

Proper Shipping Name Polyethylene glycol PEG400

Class C2 Combustible Liquids - Flash Point >93°C, Closed Cup, Not Excluded Flammable

Subsidiary Risk(s) No Data Available

No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

## Land Transport (Malaysia)

ADR Code

Proper Shipping Name Polyethylene glycol PEG400

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

# Land Transport (New Zealand)

NZS5433

**Proper Shipping Name** Polyethylene glycol PEG400

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

#### Land Transport (United States of America)

**US DOT** 

Proper Shipping Name Polyethylene glycol PEG400

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN Number No Data Available
Hazchem No Data Available

Pack GroupNo Data AvailableSpecial ProvisionNo Data Available

**Comments** NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Sea Transport** IMDG Code

Proper Shipping Name Polyethylene glycol PEG400

Class No Data Available
Subsidiary Risk(s) No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available
EMS No Data Available

Marine Pollutant No

Comments NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport IATA DGR

Proper Shipping Name Polyethylene glycol PEG400

Class No Data Available
Subsidiary Risk(s) No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Comments NON-DANGEROUS GOODS: Not regulated for AIR transport.

## **National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification** NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods

by Road & Rail (ADG Code)

#### 15. REGULATORY INFORMATION

General Information No Data Available

Poisons Schedule (Aust) Not Scheduled

# **Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code Not Hazardous

## National/Regional Inventories

Australia (AIIC) Listed

Canada (DSL) Not Determined

Canada (NDSL) Not Determined

China (IECSC) Not Determined

**Europe (EINECS)** 500-038-2

Europe (REACh) Not Determined

Japan (ENCS/METI) Not Determined

Korea (KECI) Not Determined

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Not Determined

Switzerland (Giftliste 1) Not Determined

**Switzerland (Inventory of Notified** 

Substances)

Not Determined

Taiwan (NCSR) Not Determined

USA (TSCA) Not Determined

#### **16. OTHER INFORMATION**

Related Product Codes POETGL0700, POETGL3900, POETGL4000, POETGL4001, POETGL4002, POETGL4003, POETGL4004,

POETGL4005, POETGL4006, POETGL4007, POETGL4095, POETGL4100, POETGL4101, POETGL4102, POETGL4103, POETGL4104, POETGL4200, POETGL4201, POETGL4202, POETGL4240, POETGL4250, POETGL4251, POETGL4300, POETGL4400, POETGL4401, POETGL4900, POETGL4901, POETGL4902, POETGL4910, POETGL4911, POETGL4940,

POETGL4941, POETGL4945, POETGL9000, POETGL9010, POETGL9400

Revision 6

**AICS** Australian Inventory of Chemical Substances

atm Atmosphere

**CAS** Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 Carbon Dioxide

**COD** Chemical Oxygen Demand **deg C (°C)** Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

**g** Grams

g/cm³ Grams per Cubic Centimetre

g/I Grams per Litre

**HSNO** Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health **immiscible** Liquids are insoluable in each other.

inHg Inch of Mercury

inH20 Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

**Ib** Pound

**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

Itr or L Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH20 Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Heath and Safety Commission

**OECD** Organisation for Economic Co-operation and Development

Oz Ounce

**PEL** Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

**RCP** Reciprocal Calculation Procedure

**STEL** Short Term Exposure Limit

**TLV** Threshold Limit Value

tne Tonne

**TWA** Time Weighted Average

ug/24H Micrograms per 24 Hours

**UN** United Nations

wt Weight