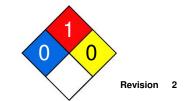


# **Material Safety Data Sheets**



## 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.

Contact Information <u>info@armansina.com</u>

www.armansina.com

#### 2. HAZARD IDENTIFICATION

Hazard Categories Not Applicable

Risk Phrases Not Applicable

Safety Phrases Not Applicable

Symbol

NOT hazardous

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

# Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Polyethylene glycol	(C <sub>2</sub> H <sub>4</sub> O)nH <sub>2</sub> O	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.

Medical Conditions Aggravated by No information available.

Exposure

#### 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.

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** 

Prevent entry into drains and waterways.

Measures

**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 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 Limits No Data Available

Biological Limits No information available.

Engineering Measures Operate 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.

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

Relative Vapour Density >1 Air = 1

Boiling PointNo Data AvailableMelting PointNo Data AvailableFreezing PointNo 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

No Data Available Corrosion Rate **Decomposition Temperature** No Data Available Density No Data Available Specific Heat No Data Available No Data Available Molecular Weight **Net Propellant Weight** No Data Available **Octanol Water Coefficient** No Data Available No Data Available Particle Size **Partition Coefficient** No Data Available **Saturated Vapour Concentration** No Data Available **Vapour Temperature** No Data Available Viscosity No Data Available Volatile Percent No Data Available **VOC Volume** No Data Available

**Additional Characteristics** No information available.

Potential for Dust Explosion Not applicable.

Fast or Intensely Burning

Characteristics

No information available.

Flame Propagation or Burning

**Rate of Solid Materials** 

No information available.

No information available.

Non-Flammables That Could

Contribute Unusual Hazards to a

**Properties That May Initiate or** Contribute to Fire Intensity

Combustible liquid; May burn but does not ignite readily.

\*Flame might be invisible in daylight.

Reactions That Release Gases or

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.

# 10. STABILITY AND REACTIVITY

**General Information** No dangerous reactions known.

**Chemical Stability** Product is stable under normal conditions. **Conditions to Avoid** Keep 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.

- Inhalation: Inhalation of vapours in high concentration may cause irritation of respiratory system.

Chronic effects: No information available.

Carcinogen Category None

# 12. ECOLOGICAL INFORMATION

 Ecotoxicity
 No information available.

 Persistence/Degradability
 No information available.

 Mobility
 No 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**

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 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.

## Sea Transport

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

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.

#### 15. OTHER INFORMATION

Revision 2

Key/Legend < Less Than

> Greater Than atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm<sup>2</sup> Square Centimetres CO2 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

inH2O 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

mmH2O 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