

**Safety Data Sheet**  
**According to Regulation (EC) No 1907/2006, Annex II,**  
**Amended by COMMISSION REGULATION (EU) 2015/830,**  
**According to REGULATION (EC) No 1272/2008**

Polyether amine D-2000

Version 1.0

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**Section 1 Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier:**

Identification on the label/Trade name: Polyether amine D-2000  
Additional identification: Not available  
Identification of the product: CAS# 9046-10-0; EC# 618-561-0  
Index Number: Not available  
REACH registration No.: 01-2119488876-14-0150 (for Ammonia)  
01-2119456809-23-0143 (for Propylene glycol)  
01-2119471987-18-0008 (for Glycerol)  
01-2119480483-35-0298 (for Propylene oxide)  
01-2119486799-10-0042 (for Trimethylol propane)

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

**1.2.1 Identified uses:**

Not available.

**1.2.2 Uses advised against:**

No uses advised against are identified.

**1.3 Details of the supplier of the safety data sheet:**

Supplier(Only representative): Chemical Inspection & Regulation Service Limited  
Supplier(Manufacturer): Yangzhou Chenhua New Material CO., LTD  
Address: No. 231, Zhenzhong Road, Caodian Town, Baoying County, Jiangsu,China.  
Contact person(E-mail): -  
Telephone: 0514-82659017  
Fax: 0514-88621598

**1.4 Emergency telephone Number:**

+353 41 980 6916 (Only available during office hours (9:00a.m.-17:30p.m. Beijing Time Zone)

Available outside office hours? YES  NO

**Section 2 Hazards Identification**

**2.1 Classification of the substance or mixture:**

**2.1.1 Classification:**

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Skin Corr. 1B,	H314
Eye Dam. 1,	H318
Aquatic Chronic 3,	H412

For full text of H- phrases: see section 2.2.

## 2.2 label elements:

### Hazard Pictograms:



### Signal Word(S):

Danger

### Hazard Statement:

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H412: Harmful to aquatic life with long lasting effects.

### Precautionary statement:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P363: Wash contaminated clothing before reuse.

P405: Store locked up.

P501: Dispose of contents/container in according with local regulation.

## 2.3 Other hazards:

Not applicable.

## Section 3 Composition/information on ingredients

### Substance/Mixture:

Substance

### Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Primary amine polymer	N/A	9046-10-0	618-561-0	≥97%

## Section 4 First aid measures

### 4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

#### 4.1.1 In case of inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician if you feel unwell.

#### 4.1.2 In case of skin contact:

Get medical attention immediately. Call a poison center or physician. Take off contaminated clothing and shoes. Wash off with soap and plenty of water.

#### 4.1.3 In case of eyes contact:

Get medical attention immediately. Call a poison center or physician. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

#### 4.1.4 In case of ingestion:

Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a physician if you feel unwell.

#### 4.2 Most important symptoms and effects, both acute and delayed:

Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage.

#### 4.3 Indication of any immediate medical attention and special treatment needed:

Symptomatic treatment and supportive therapy as indicated. Following severe exposure the patient should be kept under medical review for at least 48 hours.

### Section 5 Firefighting measures

#### 5.1 Extinguishing media:

**Suitable extinguishing media:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media:** Not available.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides and nitrogen oxides.

#### 5.3 Advice for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

### Section 6 Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures:

**6.1.1 For non-emergency personnel:** Use personal protective equipment. Ensure adequate ventilation. Avoid breathing vapors, mist or gas. Evacuate personnel to safe areas.

**6.1.2 For emergency responders:** Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

#### 6.2 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. Collect spillage.

#### 6.3 Methods and material for Containment and Cleaning up:

Pick up and arrange disposal. Keep in suitable, closed containers for disposal. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

#### 6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

### Section 7 Handling and storage

#### 7.1 Precautions for safe handling:

**7.1.1 Protective measures:** Practice good housekeeping. Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not ingest. Use with adequate ventilation. Keep away from acids.

**7.1.2 Advice on general occupational hygiene:** Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

#### 7.2 Conditions for safe storage, including any incompatibilities:

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers.

7.3 Specific end use(s): Not applicable.

## Section 8 Exposure Controls/Personal Protection

### 8.1 Control parameters:

- 8.1.1 Occupational exposure limits: Not available.  
8.1.2 Additional exposure limits under the conditions of use: Not available.  
8.1.3 DNEL/DMEL and PNEC-Values: Not available.

### 8.2 Exposure controls:

- 8.2.1 Appropriate engineering controls: Safety shower and eye bath. Mechanical exhaust required.  
8.2.2 Individual protection measures, such as personal protective equipment:  
Eye/face protection: Wear chemical goggles.  
Hand protection: Wear impervious chemical resistant gloves.  
Body protection: Protective work clothing.  
Respiratory protection: Use a full-face supplied air respirator.  
Thermal hazards: Not available.  
8.2.3 Environmental exposure controls: Avoid discharge into the environment. According to local regulations, Federal and official regulations.

## Section 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

- Appearance: Liquid  
Colour: Colorless to slight yellow  
Odour: Ammonia smell  
Odour threshold: Not available  
pH: 10.5  
Melting point/range (°C): Not available  
Boiling point/range (°C): >250°C  
Flash point (°C): 185°C (closed cup)  
Evaporation rate: Not available  
Flammability limit - lower (%): Not available  
Flammability (solid, gas): Not available  
Ignition temperature (°C): Not available  
Upper/lower explosive limits: Not available  
Vapour pressure (20°C): 0.9 hPa  
Vapour density: Not available  
Relative Density: 0.99  
Bulk density (kg/m<sup>3</sup>): Not available  
Water solubility (g/l): Not available  
n-Octanol/Water (log Po/w): 1.34  
Auto-ignition temperature: 230°C  
Decomposition temperature: Not available  
Viscosity, dynamic (mPa.s): Not available  
Explosive properties: Non-explosive  
Oxidising properties: Not oxidising  
Molecular Formula: Not available

<b>Molecular Weight:</b>	Not available
<b>9.2. Other information:</b>	
<b>Fat solubility(solvent-oil to be specified) etc:</b>	Not available
<b>Surface tension:</b>	Not available
<b>Dissociation constant in water(pKa):</b>	Not available
<b>Oxidation-reduction Potential:</b>	Not available

## Section 10 Stability and reactivity

<b>10.1 Reactivity:</b>	The substance is stable under normal storage and handling conditions.
<b>10.2 Chemical stability:</b>	Stable at room temperature in closed containers under normal storage and handling conditions.
<b>10.3 Possibility of hazardous reactions:</b>	No dangerous reactions known.
<b>10.4 Conditions to avoid:</b>	Incompatible materials.
<b>10.5 Incompatible materials:</b>	Strong oxidizing agents.
<b>10.6 Hazardous decomposition products:</b>	Carbon monoxide, carbon dioxide, nitrogen oxides.

## Section 11 Toxicological information

<b>11.1 Information on toxicological effects:</b>	
<b>Acute toxicity:</b>	
<b>LD50(Oral, Rat):</b>	2885.3 mg/kg bw
<b>LD50(Dermal, Rabbit):</b>	2 979.7 mg/kg bw
<b>LC50(Inhalation, Rat):</b>	>0.74 mg/L 8 h
<b>Skin corrosion/Irritation:</b>	Causes severe skin burns and eye damage.
<b>Serious eye damage/irritation:</b>	Causes serious eye damage.
<b>Respiratory or skin sensitization:</b>	Not classified
<b>Germ cell mutagenicity:</b>	Not classified
<b>Carcinogenicity:</b>	Not classified
<b>Reproductive toxicity:</b>	Not classified
<b>STOT- single exposure:</b>	Not classified
<b>STOT-repeated exposure:</b>	Not classified
<b>Aspiration hazard:</b>	Not classified

## Section 12 Ecological information

<b>12.1 Toxicity:</b>	
<b>Acute (short-term) toxicity:</b>	
<b>LC50(96h, Fish):</b>	772.14 mg/L
<b>EC50(48h, Crustacea):</b>	80 mg/L
<b>EC50(72h, Algae/aquatic plants):</b>	15 mg/L
<b>Chronic (long-term) toxicity:</b>	
<b>NOEC(Fish):</b>	Not available.
<b>NOEC(Crustacea):</b>	7.64 mg/L
<b>EC50(Algae/aquatic plants):</b>	Not available.
<b>12.2 Persistence and degradability:</b>	Not available.
<b>12.3 Bioaccumulative potential:</b>	Not available.
<b>12.4 Mobility in soil:</b>	Not available.

12.5 Results of PBT and vPvB assessment: Not available.

12.6 Other adverse effects: Not available.

### Section 13 Disposal considerations

**13.1 Waste treatment methods:** The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant.

### Section 14 Transport information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	2735	2735	2735	2735
UN Proper shipping name	POLYAMINES, LIQUID, CORROSIVE, N.O.S (Primary amine polymer)	POLYAMINES, LIQUID, CORROSIVE, N.O.S (Primary amine polymer)	POLYAMINES, LIQUID, CORROSIVE, N.O.S (Primary amine polymer)	POLYAMINES, LIQUID, CORROSIVE, N.O.S (Primary amine polymer)
Transport hazard Class(es)	8	8	8	8
Packing group	III	III	III	III
Environmental hazards	Yes	Yes	Yes	Yes
Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of Marpol and the IBC Code	IBC03	IBC03	IBC03	IBC03

### Section 15 Regulatory information

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

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical safety assessment YES  NO

### Section 16 Other information

#### 16.1 Indication of changes:

Version 1.0 Amended by (EU) 2015/830

#### 16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation for rail International transportation of Dangerous goods

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization

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SDS EU  
6 / 7

IATA: International Air Transport Association

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

### 16.3 Key literature references and sources for data

ECHA Registered substances data

### 16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC)

#### 1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008		Classification procedure
Skin Corr. 1B,	H314	On basis of test data
Eye Dam. 1,	H318	On basis of test data
Aquatic Chronic 3,	H412	On basis of test data

### 16.5 Relevant H-statements (number and full text):

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H412: Harmful to aquatic life with long lasting effects.

### 16.6 Training instructions:

Not applicable.

### 16.7 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

### 16.8 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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