

Ministry of Employment and Labor	Material Safety Data Sheet	Industrial Accident Prevention Korea Occupational Safety and Health Agency (KOSHA)
		AA00569-0000000024

※ Please make sure to use it with the MSDS number applied.

1. PRODUCT AND COMPANY IDENTIFICATION

- A. Product Name Benzene, 1-(dichloromethyl)-3-(isocyanatomethyl)-
- B. Recommended Use and Restrictions on Use
- Recommended Use For industrial or scientific research purposes
- Restrictions on Use No data available
- C. Supplier Information (For imports, provide local supplier information for emergency contact)
- Company Name GloryGlobal Co., Ltd.
- Address Room 1004, Seoul-Technopark, inside Seoul Tech, 232, Gongneung-ro, Nowon-gu, Seoul, Korea 01811
- Emergency Contact Number 82-2-6223-0862
- D. Additional Manufacturer/Supplier Information
- No data available

2. Hazards identification

- A. Hazard Classification
- Acute toxicity (oral): Category 4
- Acute toxicity (dermal): Category 4
- Skin irritation: Category 2
- Eye irritation: Category 2
- Acute toxicity (inhalation): Category 4
- Specific target organ toxicity – single exposure: Category 3

B. Warning Label Elements (including precautionary statements)

Pictogram



Signal word

Warning

- Hazard Statements
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.

Precautionary
Statements

Prevention

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

Response

P301+P317: IF SWALLOWED: Get medical help.

P330: Rinse mouth.

P302+P352: IF ON SKIN: Wash with plenty of water.

P317: Get medical help.

P321: Specific treatment (see ... on this label).

P362+P364: Take off contaminated clothing and wash it before reuse.

P332+P317: If skin irritation occurs: Get medical help.

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

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P319: Get medical help if you feel unwell.

Storage

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Disposal

P501: Dispose of contents/container at an appropriate disposal facility in accordance with relevant regulations and the characteristics of the product.

C. Other Hazards Not Resulting in Classification

3. Composition / Information on Ingredients

Chemical Name	Synonyms (Common Name / Trade Name)	CAS No.	Concentration (%)
Benzene, 1-(dichloromethyl)-3-(isocyanatomethyl)-	Benzene, 1-(dichloromethyl)-3-(isocyanatomethyl)-	2241290-41-3	98%
Xylene	Xylene	1330-20-7	2%

4. First Aid Measures

A. Eye Contact

Rinse immediately with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally.

Seek medical attention if irritation occurs.

B. Skin Contact

Remove contaminated clothing and shoes as quickly as possible.

Wash affected area thoroughly with soap and plenty of water for at least 15 minutes.

Consult a physician if irritation develops.

C. Inhalation

Move the victim to fresh air.

If breathing is difficult, administer medical oxygen.

D. Ingestion

Drink plenty of water and seek medical attention.

5. Firefighting Measures

Special Firefighting Procedures:

As the substance may emit toxic gases under fire conditions, it is strongly recommended to wear a pressure-demand, self-contained breathing apparatus (SCBA) and full protective clothing to prevent contact with eyes and skin.

Extinguishing Media:

Carbon dioxide, dry chemical powder, or appropriate foam.

For safety reasons, do not use full water jet or water.

6. Accidental Release Measures

General Information:

Use appropriate personal protective equipment as specified in Section 8.

Spill/Leak Procedures:

Cover with an inert material (e.g., vermiculite, sand, or soil), then collect and place in a suitable, tightly sealed container for disposal in an outdoor area.

Avoid contact with flames or sources of ignition. Dispose of in accordance with current laws and regulations.

7. Handling and Storage

A. precautions for Safe Handling

Take the precautions specified in Section 8 to prevent contact with skin and eyes.

Avoid contact with heat, flames, and sparks. Smoking should be prohibited in the work area.

B. Conditions for Safe Storage

Keep away from heat, flames, and sparks.

Store in a suitable, tightly sealed container in a cool, dry place.

8. Exposure Controls / Personal Protection

Engineering Controls:

Ventilation may be required in enclosed or poorly ventilated areas.

Protective Equipment:

Eye Protection: Wear chemical safety goggles where there is a risk of splashing. Clean contaminated goggles before reuse.

Skin Protection: Wear chemical-resistant gloves and appropriate protective clothing.

Wash contaminated gloves and clothing before reuse.

Respiratory Protection: Generally, personal respiratory protection is not required.

9. Physical and Chemical Properties

Product Characteristics

Category		Details
A. Appearance (Physical state, color, etc.)	Physical State	Liquid
	Color	Yellow

B. Odor	Not available
C. Odor Threshold	Not available
D. pH	Not available
E. Melting/Freezing Point	Not available
F. Initial Boiling Point and Boiling Range	296.3±35.0 °C Hg(lit.)
G. Flash Point	Not available
H. Evaporation Rate	Not available
I. Flammability (solid, gas)	Not available
J. Upper/Lower Flammability or Explosive Limits	Not available
K. Vapor Pressure	Not available
L. Solubility	Not available
M. Density / Relative Density	1.27±0.1 g/cm3 (lit.)
N. Specific Gravity	Not available
O. n-Octanol/Water Partition Coefficient	Not available
P. Auto-Ignition Temperature	Not available
Q. Decomposition Temperature	Not available
R. Viscosity	Not available
S. Molecular Weight	Not available

10. Stability and Reactivity

A. Chemical Stability and Possibility of Hazardous Reactions:

Not available

B. Conditions to Avoid (e.g., static discharge, shock, vibration):

Not available

C. Incompatible Materials:

Not available

D. Hazardous Decomposition Products:

Not available

11. Information on Likely Routes of Exposure

A. Information on Likely Routes of Exposure:

Not available

B. Health Hazard Information:

Acute toxicity	Oral	Not available
	Dermal	Not available
	Inhalation	Not available
Skin corrosion/irritation		Not available
Serious eye damage/eye irritation		Not available

Respiratory sensitization		Not available
Skin sensitization		Not available
Carcinogenicity	IARC	Not available
	NTP	Not available
	OSHA	Not available
	ACGIH	Not available
Carcinogenicity	Occupational Safety and Health Act (of Korea)	Not available
	Public Notice by the Ministry of Employment and Labor (MOEL)	Not available
	EU CLP	Not available

Germ cell mutagenicity	Not available
Reproductive toxicity	Not available
Specific target organ toxicity – single exposure	Not available
Specific target organ toxicity – repeated exposure	Not available
Aspiration hazard	Not available

12. Ecological Information

A. Ecotoxicity

Fish	Not available
Crustacea	Not available
Algae	Not available

B. Persistence and degradability

Persistence	Not available
Degradability	Not available

C. Bioaccumulative potential

Bioaccumulative	Not available
Biodegradability	Not available

D. Mobility in soil

Not available

E. Other adverse effects

Not available

13. Disposal Considerations

A. Disposal Considerations

Product:

This material may be disposed of through a licensed chemical destruction facility or by controlled incineration with flue gas scrubbing. Do not contaminate water, food, feed, or seeds by storage or disposal. Do not discharge into sewage systems.

Contaminated Packaging:

Containers may be triple rinsed (or treated with an equivalent method) and offered for recycling or reconditioning. Alternatively, destroy packaging to make it unusable for other purposes and dispose of it at a landfill site. For combustible packaging materials, controlled incineration with flue gas scrubbing is acceptable.

14. Transport Information

A. UN No.

Not available

B. UN Proper Shipping Name

Not available

C. Transport Hazard Class(es)

Not available

D. Packing Group (if applicable)

Not available

E. Marine Pollutant (Yes/No)

Not available

F. Special precautions for user

Emergency procedures in case of fire

Not applicable

Emergency procedures in case of spillage

Not applicable

15. Regulatory Information

Chemical Name	CAS Number or Identification Number
Benzene, 1-(dichloromethyl)-3-(isocyanatomethyl)-	2241290-41-3

Overseas Regulations

European Inventory of Existing Commercial Chemical Substances (EINECS) Not applicable

EC Inventory Not applicable

United States Toxic Substances Control Act (TSCA) Inventory Not applicable

China Catalog of Hazardous chemicals 2015 Not applicable

New Zealand Inventory of Chemicals (NZIoC) Not applicable

Philippines Inventory of Chemicals and Chemical Substances (PICCS) Not applicable

Vietnam National Chemical Inventory Not applicable

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC) Not applicable

Korea Existing Chemicals List (KECL) Not applicable

16. Other Information

Abbreviation

CAS: Chemical Abstracts Service

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

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods Code

TWA: Time Weighted Average

STEL: Short-Term Exposure Limit

LC50: Lethal Concentration, 50%

LC50: Lethal Dose, 50%

EC50: Effective Concentration, 50%

A. Source of Information

IPCS-The International Chemical Safety Cards (ICSC), website:

<http://www.ilo.org/dyn/icsc/showcard.home>

HSDB-Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

IARC-International Agency for Research on Cancer, website: <http://www.iarc.fr/>

eChemPortal- The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

ERG-Emergency Response Guidebook by U.S. Department of Transportation, website:

<http://www.phmsa.dot.gov/hazmat/library/erg>

Germany GESTIS-database on hazard substance, website:

<http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>

ECHA-European Chemicals Agency, website: <https://echa.europa.eu/>

B. Date of First Issue

2014-03-03

C. Number of Revisions and Date of Last Revision

Number of Revisions :	times	Date of Last Revision :	2024-03-03
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D. Others

○ The prepared Material Safety Data Sheet (MSDS) is considered accurate but is not all-inclusive and should be used for guidance only. The information contained herein is based on the current knowledge held by our company and is applicable with regard to appropriate safety precautions related to the product. This does not constitute any warranty of the product's properties. As the supplier, we disclaim any liability for damages resulting from handling or contact with the above-mentioned product.