



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: Choline (48-50% in Water)
Product code: C0326
Company: TCI (Shanghai) DEVELOPMENT CO., LTD.
Address: No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China
Responsible Department: Sales Department
Telephone: +86-(0)21-67121386
Fax: +86-(0)21-67121385
e-mail: sales@tcishanghai.com.cn
Revision number: 1

2. HAZARDS IDENTIFICATION

Classification of the GHS

PHYSICAL HAZARDS

Not classified

HEALTH HAZARDS

Skin corrosion/irritation

Category 1B

Serious eye damage/eye irritation

Category 1

ENVIRONMENTAL HAZARDS

Not classified

GHS label elements

Pictograms or hazard symbols



Signal word

Danger

Hazard statement

Causes severe skin burns and eye damage

Precautionary statements

[Prevention]

Do not breathe.

Wash hands thoroughly after handling.

Wear protective gloves/eye protection/face protection.

[Response]

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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

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

Wash contaminated clothing before reuse.

Immediately call a POISON CENTER or doctor/physician.

[Storage]

Store locked up.

[Disposal]

Dispose of contents/container through a waste management company authorized by the local government

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Mixture
Component(s): Choline (48-50% in Water)
Percent:
CAS Number: 123-41-1
Synonyms: 2-Hydroxyethyltrimethylammonium Hydroxide (48-50% in Water)
Chemical Formula: C₅H₁₅NO₂

4. FIRST AID MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
Ingestion:	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Specific hazards:	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
Specific methods:	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.
Special protective equipment for firefighters:	When extinguishing fire, be sure to wear personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
Environmental precautions:	Prevent product from entering drains.
Methods and materials for containment and cleaning up:	Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Handling

Technical measures:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapor or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapor or aerosol will be generated.
Advice on safe handling:	Avoid contact with skin, eyes and clothing.

Storage

Storage conditions:	Keep container tightly closed. Store in a refrigerator. Store under inert gas. Store locked up. Store away from incompatible materials such as oxidizing agents.
Packaging material:	Law is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	Install a closed system or local exhaust. Also install safety shower and eye bath.
Personal protective equipment	
Respiratory protection:	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
Hand protection:	Impervious gloves.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection: Safety goggles. A face-shield, if the situation requires.
Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid
Form: clear - cloudy
Color: Yellow - Brown
Odor: No data available
pH: No data available
Melting point/freezing point: No data available
Boiling Point/Range: No data available
Flash Point: No data available
Explosive limits
Lower: No data available
Upper: No data available
Density: 1.08
Solubility: Miscible with : Water
Insoluble in: Benzene Toluene

10. STABILITY AND REACTIVITY

Stability: Stable under proper conditions.
Reactivity: No special reactivity has been reported.
Conditions to avoid: Heat-sensitive, Light-sensitive, Air-sensitive
Incompatible materials: oxidizing agents, acids
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: ivn-mus LD50:21.4 mg/kg
Skin corrosion/irritation: No data available
Serious eye damage/irritation: No data available
Germ cell mutagenicity: No data available
Carcinogenicity:
IARC = No data available
NTP = No data available
Reproductive toxicity: No data available
RTECS Number: GA4025500

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Fish: No data available
Crustacea: No data available
Algae: No data available
Persistence / degradability: No data available
Bioaccumulative potential(BCF): No data available
Mobility in soil
log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law constant(PaM³/mol): No data available

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class: 8: Corrosive.
UN-No: 3267
Proper shipping name: Corrosive liquid, basic, organic, n.o.s.
Packing group: II

15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

16. OTHER INFORMATION

The reference company name of written contents

Company: TCI (Shanghai) DEVELOPMENT CO., LTD.
Address: No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China
Department: R&D (Information Management) Department
Telephone: +86-(0)21-67121388*461
Fax: +86-(0)21-67121385

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