4-Ethyl-2,3-dioxo-1-piperazinecarbonyl Chloride Revision number: 1 Revision date: 11/30/2010 Page 1 of 4

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SAFETY DATA SHEET

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

Product name: 4-Ethyl-2,3-dioxo-1-piperazinecarbonyl Chloride

Product code: E0758

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

Corrosive to metals Category 1

HEALTH HAZARDS

Skin corrosion/irritationCategory 1CSerious eye damage/eye irritationCategory 1ENVIRONMENTAL HAZARDSNot classified

GHS label elements

Pictograms or hazard symbols



Signal word Danger

Hazard statement May be corrosive to metals

Causes severe skin burns and eye damage

Precautionary statements

[Prevention] Keep only in original container.

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.

Absorb spillage to prevent material damage.

[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: Substance

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component(s): 4-Ethyl-2,3-dioxo-1-piperazinecarbonyl Chloride

Percent: >97.0%(LC) 59703-00-3 **CAS Number: Chemical Formula:** C₇H₉CIN₂O₃

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.

Rinse cautiously with water for several minutes. Remove contact lenses, if present Eve contact:

and easy to do. Continue rinsing. Immediately call a POISON CENTER or

doctor/physician.

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT Ingestion:

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, carbon dioxide.

Extinguishing media not to Water

be used:

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

When extinguishing fire, be sure to wear personal protective equipment.

equipment for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal precautions. protective equipment and emergency procedures:

Use extra personal protective equipment (P3 filter respirator for toxic particles). Keep people away from and upwind of spill/leak. 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

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with

appropriate laws and regulations.

Prevention of secondary

hazards:

up:

Do not allow contact with water. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-

proof equipment.

7. HANDLING AND STORAGE

Handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Technical measures:

> Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be

generated.

Avoid contact with skin, eyes and clothing. Advice on safe handling:

> May develop pressure. Open carefully. Use corrosive resistant equipment.

Storage

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Store locked up.

7. HANDLING AND STORAGE

Store away from incompatible materials such as oxidizing agents.

Packaging material: Law is followed. Keep only in original container.

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: Dust 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.

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): Solid

Form: crystal - powder

Color: White - Very pale yellow

Odor: No data available PH: No data available

Melting point/freezing point: 96 °C

Boiling Point/Range: No data available Flash Point: No data available

Explosive limits

Lower:No data availableUpper:No data availableDensity:No data availableSolubility:No data available

10. STABILITY AND REACTIVITY

Stability: Stable under proper conditions.

Reactivity: Decomposes in contact with water and liberates toxic gases.

Incompartible materials: oxidizing agents

Hazardous Decomposition Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx), Hydrogen chloride

Products:

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:
Skin corrosion/irritation:
No data available
No data available
No data available

damage/irritation:

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC = No data available
NTP = No data available
Reproductive toxicity: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish:
Crustacea:
Algae:
No data available

potential(BCF): Mobillity in soil

log Pow: No data available

12. ECOLOGICAL INFORMATION

Soil adsorption (Koc): No data available Henry's Law No data available

constant(PaM³/mol):

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class: 8: Corrosive.

UN-No: 3261

Proper shipping name: Corrosive solid, acidic, organic, n.o.s.

Packing group:

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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