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**Revision date: 11/30/2010** 

# **SAFETY DATA SHEET**

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

Product name: Isobutyryl Bromide

Product code: 10114

Company: TCI (Shanghai) DEVELOPMENT CO., LTD.

Address: No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China

Responsible Department: Sales Department +86-(0)21-67121386 +86-(0)21-67121385 e-mail: sales@tcishanghai.com.cn

Revision number: 1

## 2. HAZARDS IDENTIFICATION

Classification of the GHS PHYSICAL HAZARDS Flammable liquids

Flammable liquids Category 3
Corrosive to metals Category 1

HEALTH HAZARDS

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

**GHS** label elements

Pictograms or hazard symbols





Signal word

Hazard statement Flammable liquid and vapour May be corrosive to metals

Causes severe skin burns and eye damage

**Precautionary statements** 

[Prevention] Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed. Keep only in original container.

Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary

measures against ignition by the static discharge and the spark.

Do not breathe.

Wash hands thoroughly after handling.

Wear protective gloves/eye protection/face protection.

Danger

[Response] IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

oreathing.

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.

## 2. HAZARDS IDENTIFICATION

[Storage] Store in a well-ventilated place. Keep cool.

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

Component(s): Isobutyryl Bromide
Percent: >95.0%(GC)

CAS Number: 2736-37-0

Chemical Formula: C<sub>4</sub>H<sub>7</sub>BrO

#### 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, 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: Keep containers cool by spraying with water but NO direct contact with water. Eliminate all ignition sources 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** Absorb spilled material in dry sand or inert absorbent before recovering it into an

Methods and materials for containment and cleaning up:

airtight container. 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.

**Prevention of secondary** 

hazards:

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

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

Prevent generation of vapor or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. 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.

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

Storage

**Storage conditions:** Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store under inert gas. Protect from moisture. Store locked up.

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: 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.

**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 clear

Color: Very pale yellow - Pale yellow

Odor: No data available PH: No data available Melting point/freezing point: No data available

Boiling Point/Range: 117 °C

Flash Point: No data available

**Explosive limits** 

Lower: No data available Upper: No data available

Density: 1.39

Solubility: No data available

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under proper conditions.

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

Conditions to avoid: Moisture-sensitive Incompartible materials: oxidizing agents

Hazardous Decomposition Carbon monoxide, Carbon dioxide, Hydrogen bromide

**Products:** 

## 11. TOXICOLOGICAL INFORMATION

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

damage/irritation:

## 11. TOXICOLOGICAL INFORMATION

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: No data available
Crustacea: No data available
Algae: No data available
Persistence / degradability: No data available
Bioaccumulative No data available

potential(BCF): Mobillity in soil

log Pow:No data availableSoil adsorption (Koc):No data availableHenry's LawNo data available

constant(PaM³/mol):

## 13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to 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.

**Subsidiary risk:** 3: Flammable liquid.

UN-No: 2920

**Proper shipping name:** Corrosive liquid, flammable, 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.

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**Department:** R&D (Information Management) Department

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