TCI (Shanghai) DEVELOPMENT CO., LTD.

2-(Butylthio)ethanol

**Revision number:** 1

Revision date: 11/29/2010

/29/2010 P

Page 1 of 4

Revision date: 11/29/2010

SAFETY DATA SHEET

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

Product name: Product code: Company: Address: Responsible Department: Telephone: Fax: e-mail: Revision number: 2-(Butylthio)ethanol B0917 TCI (Shanghai) DEVELOPMENT CO., LTD. No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China Sales Department +86-(0)21-67121386 +86-(0)21-67121385 sales@tcishanghai.com.cn 1

### 2. HAZARDS IDENTIFICATION

Classification of the GHS	
PHYSICAL HAZARDS	Not classified
HEALTH HAZARDS	Not classified
ENVIRONMENTAL HAZARDS	Not classified
GHS label elements	
Pictograms or hazard symbols	None
Signal word	No signal word
Hazard statement	None
Precautionary statements	None

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Component(s):	2-(Butylthio)ethanol
Percent:	>95.0%(GC)
CAS Number:	5331-37-3
Synonyms:	Butyl 2-Hydroxyethyl Sulfide
Chemical Formula:	C <sub>6</sub> H <sub>14</sub> OS

# 4. FIRST AID MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin contact:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion:	Get medical advice/attention if you feel unwell. Rinse mouth.
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air- tight goggles.

# **5. FIRE-FIGHTING MEASURES**

Dry chemical, foam, carbon dioxide.
Water (It may scatter and spread fire.)
Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

# **5. FIRE-FIGHTING MEASURES**

Incompartible materials:

oxidizing agents

5. FIRE-FIGHTING MEASURES	
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:	
equipment for menginters.	
6. ACCIDENTAL RELEASE ME	
Personal precautions,	Use personal protective equipment. Keep people away from and upwind of spill/leak.
protective equipment and	Ensure adequate ventilation. Entry to non-involved personnel should be controlled
emergency procedures:	around the leakage area by roping off, etc.
	: Prevent product from entering drains.
Methods and materials for	Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust).
containment and cleaning	In case of large amount of spillage, contain a spill by bunding. Adhered or collected
up:	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 ventilation, local exhaust if vapor or aerosol will be generated.
Advice on safe handling:	Avoid contact with skin, eyes and clothing.
Storage	
	Keen container tightly closed. Stars in a cool and dark place
Storage conditions:	Keep container tightly closed. Store in a cool and dark place.
<b>D</b> eal a sin some fastel	Store away from incompatible materials such as oxidizing agents.
Packaging material:	Law is followed.
8. EXPOSURE CONTROLS / P	
8. EXPOSURE CONTROLS / P Engineering controls:	Install a closed system or local exhaust as possible so that workers should not be
Engineering controls:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.
Engineering controls: Personal protective equipn	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.
Engineering controls:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.
Engineering controls: Personal protective equipn	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.
Engineering controls: Personal protective equipn Respiratory protection:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>nent</b> Vapor respirator. Follow local and national regulations.
Engineering controls: Personal protective equipn Respiratory protection: Hand protection: Eye protection:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>nent</b> Vapor respirator. Follow local and national regulations. Protective gloves.
Engineering controls: Personal protective equipn Respiratory protection: Hand protection: Eye protection:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires.
Engineering controls: Personal protective equipn Respiratory protection: Hand protection: Eye protection:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires.
Engineering controls: Personal protective equipn Respiratory protection: Hand protection: Eye protection: Skin and body protection:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. PROPERTIES
Engineering controls: Personal protective equipn Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires.
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. PROPERTIES Liquid clear Colorless - Pale yellow No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. PROPERTIES Liquid clear Colorless - Pale yellow No data available No data available t:No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. PROPERTIES Liquid clear Colorless - Pale yellow No data available No data available t: No data available 217 °C
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. PROPERTIES Liquid clear Colorless - Pale yellow No data available No data available t:No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available No data available <b>t</b> :No data available <b>217</b> °C No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Pent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available t: No data available 217 °C No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Pent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available t:No data available 217 °C No data available No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper: Density:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available No data available 217 °C No data available No data available No data available No data available No data available 0.97
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Pent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available t:No data available 217 °C No data available No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper: Density: Solubility:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available t:No data available 217 °C No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper: Density: Solubility: 10. STABILITY AND REACTIVE	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available t:No data available t:No data available No data available TY
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper: Density: Solubility: 10. STABILITY AND REACTIVE	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available t:No data available 217 °C No data available No data available 0.97 No data available <b>TY</b> Stable under proper conditions.
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper: Density: Solubility: 10. STABILITY AND REACTIVE	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. <b>Nent</b> Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. <b>PROPERTIES</b> Liquid clear Colorless - Pale yellow No data available t:No data available t:No data available No data available TY

#### **10. STABILITY AND REACTIVITY**

**Hazardous Decomposition** Carbon monoxide, Carbon dioxide, Sulphur oxides **Products:** 

### **11. TOXICOLOGICAL INFORMATION**

Acute Toxicity:	No data available
Skin corrosion/irritation:	No data available
Serious eye	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:	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 available
Soil adsorption (Koc):	No data available
Henry's Law	No data available
constant(PaM <sup>3</sup> /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:Does not correspond to the classification standard of the United NationsUN-No:Not Listed

### **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 comp	any 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
	the basis of the information we exclude the inequal basis on a superstant to be located with a second on the slate

This MSDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.