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**Revision date: 11/29/2010** 

# **SAFETY DATA SHEET**

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

**Product name:** 1-Allyl-2-thiourea

Product code: A0220

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

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

Not classified

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

**HEALTH HAZARDS** 

Acute toxicity (Oral)
Skin corrosion/irritation
Serious eye damage/eye irritation
ENVIRONMENTAL HAZARDS
Category 2
Category 2A
Not classified

**GHS** label elements

Pictograms or hazard symbols



Signal word Danger

Hazard statement Toxic if swallowed Causes skin irritation

Causes serious eye irritation

**Precautionary statements** 

[Prevention] Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Wear protective gloves/eye protection/face protection.

[Response] IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse

mouth.

IF IN EYES: 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. IF ON SKIN: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

[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:SubstanceComponent(s):1-Allyl-2-thioureaPercent:>98.0%(T)CAS Number:109-57-9

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Rhodalline, Thiosinamine

**Chemical Formula:** C<sub>4</sub>H<sub>8</sub>N<sub>2</sub>S

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. Gently wash with plenty of

soap and water. If skin irritation or rash occurs: Get medical advice/attention.

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

and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention.

Ingestion: Immediately call a POISON CENTER or doctor/physician. 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

Specific hazards:

Suitable extinguishing

media:

Dry chemical, foam, water spray, carbon dioxide.

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

up:

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.

# 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.

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

**Storage** 

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

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Law is followed. Packaging material:

# 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.

Impervious gloves. Hand protection:

# 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): Solid

Form: crystal - powder

Color: White - Very pale yellow

Odor: Garlic-like

pH: No data available

Melting point/freezing point:71 °C

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

**Explosive limits** 

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

Solubility: Soluble in : Water Methanol Ethanol

Slightly soluble in: Ether Insoluble in: Benzene

log Pow = -0.12

# 10. STABILITY AND REACTIVITY

**Stability:** Stable under proper conditions.

**Reactivity:** No special reactivity has been reported.

Incompartible materials: oxidizing agents

Hazardous Decomposition Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx), Sulphur oxides

**Products:** 

# 11. TOXICOLOGICAL INFORMATION

Acute Toxicity: ipr-mus LD50:1858 mg/kg

ipr-rat LD50:500 mg/kg ivn-dog LDLo:110 mg/kg orl-rat LD50:200 mg/kg

Skin corrosion/irritation:
Serious eye
No data available
No data available

damage/irritation:

**Germ cell mutagenicity:** mmo-sat 150 ug/plate (+S9)

Carcinogenicity:

IARC = No data available
NTP = No data available
Reproductive toxicity: No data available
RTECS Number: YR8050000

#### 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:** -0.12

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:** 6.1: Toxic substance.

**UN-No**: 2811

**Proper shipping name:** Toxic solid, 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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