Trichloroacetonitrile Revision number: 1 Revision date: 12/01/2010 Page 1 of 5

Revision date: 12/01/2010

SAFETY DATA SHEET

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

Product name: Trichloroacetonitrile

Product code: T0372

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)

Acute toxicity (Dermal)

Acute toxicity (Inhalation)

Skin corrosion/irritation

Serious eye damage/eye irritation

Category 2

Category 2

Category 2

Category 2

Category 1B

Specific target organ toxicity

Narcotic effects

- Single exposure [Category 3]

ENVIRONMENTAL HAZARDS

Acute aquatic toxicity
Chronic aquatic toxicity
Category 2
Category 2

GHS label elements

Pictograms or hazard symbols







Signal word Hazard statement

Danger

Toxic by inhalation, in contact with skin and if swallowed

Causes skin irritation

Causes serious eye irritation

May damage fertility or the unborn child May cause drowsiness and dizziness

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Precautionary statements [Prevention]

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

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

Wash hands thoroughly after handling.

Wear protective gloves and eye/face protection.

2. HAZARDS IDENTIFICATION

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

breathing. Call a POISON CENTER or doctor/physician.

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

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. Remove/Take off immediately all contaminated clothing.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

Collect spillage.

[Storage] Store in a well-ventilated place. Keep container tightly closed.

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): Trichloroacetonitrile

Percent: >98.0%(GC) **CAS Number:** 545-06-2 **Chemical Formula:** C₂Cl₃N

4. FIRST AID MEASURES

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

Call a POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of

soap and water. 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. Get medical advice/attention.

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

A rescuer should wear personal protective equipment, such as rubber gloves and air-Protection of first-aiders:

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 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 (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to noninvolved personnel should be controlled around the leakage area by roping off, etc. Environmental precautions: Be careful not to let it flow into rivers, etc., since adverse effects on the environment

are concerned.

6. ACCIDENTAL RELEASE MEASURES

containment and cleaning

up:

Methods and materials for 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 all contact!

Storage

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

Color: Colorless - Very pale yellow

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

85 °C **Boiling Point/Range:**

Flash Point: No data available

Explosive limits

Lower: No data available No data available Upper: 9.9kPa/25°C **Vapor Pressure:**

Density:

Very soluble in : Many organic solvents Solubility:

Insoluble in: Water (715mg/L 25°C)

log Pow =

10. STABILITY AND REACTIVITY

Stability: Stable under proper conditions.

Reactivity: No special reactivity has been reported.

Incompartible materials: oxidizing agents, strong acids, strong bases, reducing agents

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

Products:

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: ihl-rat LCLo:250 ppm/4H

ivn-mus LD50:56 mg/kg orl-rat LD50:250 mg/kg skn-rbt LD50:900 uL/kg

Skin corrosion/irritation: skn-rbt 5 mg/24H SEV **Serious eye** eye-rbt 50 ug/24H SEV

damage/irritation:

Germ cell mutagenicity: dnd-hmn-hla 1 umol/L/30M

dnd-hmn-lym 1 umol/L mmo-sat 3333 ug/plate (-S9) mmo-sat 70 umol/L/72H (-S9)

Carcinogenicity:

IARC = Group 3 (Not classifiable as carcinogenic to humans).

NTP = No data available
Reproductive toxicity: No data available
RTECS Number: AM2450000

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish:
Crustacea:
Algae:
No data available

potential(BCF): Mobillity in soil

log Pow: 2.09

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. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class: 6.1: Toxic substance.

UN-No: 3276

Proper shipping name: Nitriles, toxic, liquid, 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.

The list of a dangerous chemical(2002)/CN-No.: 61634

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

16. OTHER INFORMATION

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 "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration 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.