CI (Shanghai) DEVELOPMENT CO., LTD.

Isothiocyanic Acid 1-Adamantyl Ester

Revision number: 1

Revision date: 11/30/2010

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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: Isothiocyanic Acid 1-Adamantyl Ester I0485 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 HEALTH HAZARDS Acute toxicity (Oral) Acute toxicity (Inhalation) Skin corrosion/irritation Serious eye damage/eye irritation Specific target organ toxicity - Single exposure [Category 3] ENVIRONMENTAL HAZARDS GHS label elements Pictograms or hazard symbols

Not classified

Category 4 Category 4 Category 2 Category 2A Respiratory tract irritation

Not classified



Signal word Hazard statement

Precautionary statements [Prevention]

[Response]

Warning Harmful by inhalation and if swallowed Causes skin irritation Causes serious eye irritation May cause respiratory irritation

Avoid breathing. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear protective gloves/eve protection/face protection. 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 you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. 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. Call a POISON CENTER or doctor/physician if you feel unwell.

2. HAZARDS IDENTIFICATION [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/INFORMATI Substance/mixture:	ON ON INGREDIENTS Substance	
Component(s):	Isothiocyanic Acid 1-Adamantyl Ester	
Percent:	>98.0%(GC)	
CAS Number:	4411-26-1	
Synonyms: Chemical Formula:	1-Adamantyl Isothiocyanate C ₁₁ H ₁₅ NS	
4. FIRST AID MEASURES	Remove victim to fresh air and keep at reat in a position comfortable for breathing	
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.	
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of	
Eye contact:	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	
Lyc contact.	and easy to do. Continue rinsing. If eye irritation persists: Get medical	
	advice/attention.	
Ingestion:	Call a POISON CENTER or doctor/physician 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 MEASURE	S	
Suitable extinguishing	Dry chemical, foam, water spray, carbon dioxide.	
media: 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 equipment for firefighters:	When extinguishing fire, be sure to wear personal protective equipment.	
6. ACCIDENTAL RELEASE MI		
Personal precautions,	Use extra personal protective equipment (P3 filter respirator for toxic particles). Keep	
protective equipment and	people away from and upwind of spill/leak. Entry to non-involved personnel should	
emergency procedures:	be controlled around the leakage area by roping off, etc. Prevent product from entering drains.	
Methods and materials for	Sweep dust to collect it into an airtight container, taking care not to disperse it.	
containment and cleaning	Adhered or collected material should be promptly disposed of, in accordance with	
up:	appropriate laws and regulations.	
7. HANDLING AND STORAGE Handling		
Technical measures:	Handling is performed in a well ventilated place. Wear suitable protective equipment.	
	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, dark and well-ventilated place.	

7. HANDLING AND STORAGE

	Store under inert gas.
	Protect from moisture.
	Store locked up.
	Store away from incompatible materials such as oxidizing agents.
Packaging material:	Law is followed.

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 - Pale yellow	
Odor:	No data available	
pH:	No data available	
Melting point/freezing point: 168 °C		
Boiling Point/Range:	No data available	
Flash Point:	No data available	
Explosive limits		
Lower:	No data available	
Upper:	No data available	
Density:	No data available	
Solubility:	No data available	

10. STABILITY AND REACTIVITY

Stability:	Stable under proper conditions.
Reactivity:	No special reactivity has been reported.
Conditions to avoid:	Hygroscopic
Incompartible materials:	oxidizing agents
Hazardous Decomposition	Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx), 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: Carcinogenicity:	No data available
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 No data available Algae: Persistence / degradability: No data available

12. ECOLOGICAL INFORMATION

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 ³ /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: UN-No: Does not correspond to the classification standard of the United Nations 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 company name of written contentsCompany:TCI (Shanghai) DEVELOPMENT CO., LTD.Address:No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 ChinaDepartment:R&D (Information Management) DepartmentTelephone:+86-(0)21-67121388*461Fax:+86-(0)21-67121385

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