TCI (Shanghai) DEVELOPMENT CO., LTD.

3-Chloropivalic Acid

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:**

3-Chloropivalic Acid C1554 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 Corrosive to metals **HEALTH HAZARDS** Skin corrosion/irritation Serious eye damage/eye irritation **ENVIRONMENTAL HAZARDS GHS** label elements Pictograms or hazard symbols

Danger Signal word Hazard statement May be corrosive to metals **Precautionary statements** [Prevention] Keep only in original container. Do not breathe. Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. [Response] breathing. if present and easy to do. Continue rinsing. skin with water/shower.

[Storage] [Disposal] the local government

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Category 1

Category 1C Category 1 Not classified

Causes severe skin burns and eye damage

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician. Absorb spillage to prevent material damage. Store locked up. Dispose of contents/container through a waste management company authorized by

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component(s):	3-Chloropivalic Acid
Percent:	>98.0%(T)
CAS Number:	13511-38-1
Synonyms:	3-Chloro-2,2-dimethylpropionic Acid
Chemical Formula:	C ₅ H ₉ ClO ₂

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, 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 equipment for firefighters:	When extinguishing fire, be sure to wear personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

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.
Environmental precautions:	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

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.
Avoid contact with skin, eyes and clothing. Use corrosive resistant equipment.
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. 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:	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.
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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 - Almost white
Odor:	No data available
pH:	No data available
Melting point/freezing point	::43 °C
Boiling Point/Range:	131 °C/4kPa
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.
Incompartible materials:	oxidizing agents
Hazardous Decomposition	Carbon monoxide, Carbon dioxide, Hydrogen chloride
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 ³ /mol):	
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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:	8: Corrosive.
UN-No:	3261
Proper shipping name:	Corrosive solid, acidic, organic, n.o.s.
Packing group:	III

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
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SDS was prepared sincerely	on the basis of the information we could obtained however, any warranty shall not be given regarding the data

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.