TCI (Shanghai) DEVELOPMENT CO., LTD.

m-Tolylacetic Acid

Revision number: 1

Revision date: 12/01/2010

Page 1 of 4

Revision date: 12/01/2010

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:**

m-Tolylacetic Acid T0880 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** Skin corrosion/irritation Serious eye damage/eye irritation **ENVIRONMENTAL HAZARDS GHS** label elements Pictograms or hazard symbols



Signal word Hazard statement

Precautionary statements [Prevention]

[Response]

Not classified

Category 2 Category 2A Not classified

Warning Causes skin irritation Causes serious eye irritation

Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Component(s): Percent: CAS Number: Synonyms: **Chemical Formula:**

Substance m-Tolylacetic Acid >98.0%(T) 621-36-3 3-Methylphenylacetic Acid $C_9H_{10}O_2$

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.

4. FIRST AID MEASURES	
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.
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.
ingeenem	
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 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 M	EASURES
Personal precautions,	Use personal protective equipment. Keep people away from and upwind of spill/leak.
protective equipment and	Entry to non-involved personnel should be controlled around the leakage area by
emergency procedures:	roping off, etc.
	s: Prevent product from entering drains.
Methods and materials for	
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.
Handling	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling.
<u>Handling</u> 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 local exhaust if dust or aerosol will be generated.
<u>Handling</u> Technical measures: Advice on safe handling:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling.
<u>Handling</u> Technical measures: Advice on safe handling: <u>Storage</u>	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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing.
<u>Handling</u> Technical measures: Advice on safe 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place.
<u>Handling</u> Technical measures: Advice on safe handling: <u>Storage</u> Storage conditions:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents.
<u>Handling</u> Technical measures: Advice on safe handling: <u>Storage</u>	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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place.
Handling Technical measures: Advice on safe handling: <u>Storage</u> Storage conditions: Packaging material:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed.
Handling Technical measures: Advice on safe handling: <u>Storage</u> Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL PROTECTION
Handling Technical measures: Advice on safe handling: <u>Storage</u> Storage conditions: Packaging material:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL PROTECTION Install a closed system or local exhaust as possible so that workers should not be
HandlingTechnical measures:Advice on safe handling:StorageStorage conditions:Packaging material:8. EXPOSURE CONTROLS / F Engineering controls:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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.
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equiption	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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.
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipation Respiratory protection:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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.
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipation Respiratory protection: Hand protection:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Ment Dust respirator. Follow local and national regulations. Protective gloves.
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipute Respiratory protection: Hand protection: Every protection:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. ment Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires.
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipute Respiratory protection: Hand protection: Every protection:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Ment Dust respirator. Follow local and national regulations. Protective gloves.
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equiputer Respiratory protection: Hand protection: Every protection: Skin and body protection	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. ment Dust 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.
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipulation Respiratory protection: Hand protection: Eve protection: Skin and body protection 9. PHYSICAL AND CHEMICAL	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Ment Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. PROPERTIES
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equiputer Respiratory protection: Hand protection: Every protection: Skin and body protection	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. PROPERTIES Solid
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipulation Respiratory protection: Hand protection: Eve protection: Skin and body protection 9. PHYSICAL AND CHEMICAL	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. PROPERTIES Solid crystal - powder
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipation Respiratory protection: Hand protection: Every protection: Skin and body protection 9. PHYSICAL AND CHEMICAI Physical state (20°C):	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. ment Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. PROPERTIES Solid crystal - powder White - Very pale yellow
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipute Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: Oldor:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. ment Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. PROPERTIES Solid crystal - powder White - Very pale yellow No data available
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipute Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: Physical state (20°C): Form: Color: Odor: pH:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. PROPERTIES Solid crystal - powder White - Very pale yellow No data available
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipute Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing point	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Dust 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 Solid crystal - powder White - Very pale yellow No data available No data available Metal acid available Metal available
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipute Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: Physical state (20°C): Form: Color: Odor: pH:	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. PROPERTIES Solid crystal - powder White - Very pale yellow No data available
Handling Technical measures: Advice on safe handling: Storage Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / F Engineering controls: Personal protective equipute Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing point	 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 local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Law is followed. PERSONAL 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. Dust 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 Solid crystal - powder White - Very pale yellow No data available No data available Metal acid available Metal available

9. PHYSICAL AND CHEMICAL PROPERTIES Flash Point: No data available Explosive limits Lower: No data available No data available Upper: Density: No data available Solubility: Soluble in : Methanol **10. STABILITY AND REACTIVITY** Stable under proper conditions. Stability: No special reactivity has been reported. **Reactivity:** Incompartible materials: oxidizing agents Hazardous Decomposition Carbon monoxide, Carbon dioxide **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

No data available
No data available
No data available
No data available
No data available

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: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 company name of written contentsCompany:TCI (Shanghai) DEVELOPMENT CO., LTD.

16. OTHER INFORMATION Address:

Department:	
Telephone:	
Fax:	

No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China R&D (Information Management) Department +86-(0)21-67121388*461 +86-(0)21-67121385

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.