TCI (Shanghai) DEVELOPMENT CO., LTD.

Monomethyl Glutarate

Revision number: 1

Revision date: 11/30/2010

Page 1 of 4

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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: Monomethyl Glutarate G0258 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 Not classified PHYSICAL HAZARDS Not classified **HEALTH HAZARDS ENVIRONMENTAL HAZARDS** Not classified **GHS** label elements Pictograms or hazard symbols None Signal word No signal word None **Hazard statement** None **Precautionary statements**

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Component(s):	Substance Monomethyl Glutarate
Percent:	>97.0%(GC)(T)
CAS Number:	1501-27-5
Synonyms: Chemical Formula:	Glutaric Acid Monomethyl Ester $C_6H_{10}O_4$

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. Rinse skin with
Eye contact:	water/shower. If skin irritation or rash occurs: Get medical advice/attention. 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.
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.Extinguishing media not to
be used:Solid streams of water

5. FIRE-FIGHTING MEASURES

Incompartible materials:

5. FIRE-FIGHTING MEASURES	
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 ME	EASURES
Personal precautions,	Use personal protective equipment. Keep people away from and upwind of spill/leak.
protective equipment and	Ensure adequate ventilation. Entry to non-involved personnel should be controlled
emergency procedures:	around the leakage area by roping off, etc.
Methods and materials for	: Prevent product from entering drains. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust).
containment and cleaning	In case of large amount of spillage, contain a spill by bunding. Adhered or collected
up:	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.
Advice on safe handling:	Use a ventilation, local exhaust if vapor or aerosol will be generated. Avoid contact with skin, eyes and clothing.
Storage	Avoid contact with skin, eyes and clothing.
Storage conditions:	Keep container tightly closed. Store in a cool and dark place.
otorage conditions.	Store away from incompatible materials such as oxidizing agents.
Packaging material:	Law is followed.
8 EXPOSURE CONTROLS / P	FRSONAL PROTECTION
8. EXPOSURE CONTROLS / P Engineering controls:	
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	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.
Engineering controls: Personal protective equipn Respiratory 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. nent Vapor respirator. Follow local and national regulations.
Engineering controls: Personal protective equipn Respiratory protection: Hand 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. nent Vapor respirator. Follow local and national regulations. Protective gloves.
Engineering controls: Personal protective equipn Respiratory protection: Hand protection: Eye 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. nent Vapor respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires.
Engineering controls: Personal protective equipn Respiratory protection: Hand protection: Eye 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. nent Vapor respirator. Follow local and national regulations. Protective gloves.
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C):	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid clear
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid clear Colorless - Very pale yellow
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available No data available t:No data available 158 °C/3.6kPa
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available No data available t : No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available No data available 158 °C/3.6kPa No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available t: No data available 158 °C/3.6kPa No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available t:No data available 158 °C/3.6kPa No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper: Density:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available t: No data available 158 °C/3.6kPa No data available No data available
Engineering controls: Personal protective equipm Respiratory protection: Hand protection: Eye protection: Skin and body protection: Skin and body protection: 9. PHYSICAL AND CHEMICAL Physical state (20°C): Form: Color: Odor: pH: Melting point/freezing poin Boiling Point/Range: Flash Point: Explosive limits Lower: Upper: Density: Solubility:	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Nent Vapor 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 Liquid clear Colorless - Very pale yellow No data available t:No data available t:No data available No data available
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oxidizing agents, strong acids, strong bases

10. STABILITY AND REACTIVITY

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

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):	

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to 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 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	
	, an the basis of the information we exclude the local become any comparis, shall not be above repeating the date	

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 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.