

Revision number: 4 Revision date: 08/15/2016

IDENTIFICATION 1.

Product name: Product code:

1-Methylcyclohexanol M0328

For laboratory research purposes.

Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Acute Toxicity - Oral [Category 4] Skin Corrosion/Irritation [Category 2] Specific Target Organ Toxicity (Single Exposure) [Category 3]

Signal word:

Warning!

Hazard Statement(s):

May cause drowsiness or dizziness.

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal]

Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves. Avoid breathing dusts or mists. Use only outdoors or in a well-ventilated area. If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components: Percent:

Substance 1-Methylcyclohexanol >97.0%(GC)

Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) **Responsible department: TCI** America Environmental Health Safety and Security +1-503-286-7624

Causes skin irritation Harmful if swallowed

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3. COMPOSITION/INFORMATIO	N ON INGREDIENTS	
CAS Number:	590-67-0	
Molecular Weight:	114.19	
Chemical Formula:	C7H14O	
4. FIRST-AID MEASURES		
Inhalation:	Call a poison center or doctor if you feel unwell. Effects of ex delayed. Inhalation of vapors or contact with substance will re effects. Move victim to fresh air. Give artificial respiration if vi breathing is difficult. Keep victim warm and quiet. Treat symp medical personnel are aware of the material(s) involved and	esult in contamination and potential harmful ictim is not breathing. Administer oxygen if otomatically and supportively. Ensure that
Skin contact:	Call a poison center or doctor if you feel unwell. Effects of ex delayed. Remove and wash contaminated clothing before re- clothing and shoes. In case of contact with substance, immed least 20 minutes. Treat symptomatically and supportively. En material(s) involved and take precautions to protect themselv	posure (skin contact) to substance may be -use. Remove and isolate contaminated diately flush skin with running water for at usure that medical personnel are aware of the res.
Eye contact:	If this chemical contacts the eyes, immediately wash (irrigate occasionally lifting the lower and upper eyelids. Contact with irritation persists get medical advice/attention. Move victim to lenses. Keep victim warm and quiet. Treat symptomatically a substance may be delayed. Ensure that medical personnel a precautions to protect themselves.	material may irritate or burn eyes. If eye of resh air. Check for and remove any contact and supportively. Effects of exposure to
Ingestion:	Harmful if swallowed. Do not induce vomiting with out medica substance may be delayed. If swallowed, seek medical advic label. Do not use mouth-to-mouth method if victim ingested th the aid of a pocket mask equipped with a one-way valve or o Loosen tight clothing such as a collar, tie, belt or waistband. I position so that vomit will not reenter the mouth and throat. R Treat symptomatically and supportively. Ensure that medical involved and take precautions to protect themselves.	e immediately and show the container or he substance; give artificial respiration with ther proper respiratory medical device. If a person vomits place them in the recovery Rinse mouth. Keep victim warm and quiet.
Symptoms/effects:		
Acute: Delayed:	Dizziness. Redness. Drowsiness. No data available	
Immediate medical attention:	WARNING: It might be hazardous to the person providing aid the inhaled material is harmful. If breathing has stopped, perf treatment according to the nature of the injury. Ensure that m involved and take precautions to protect themselves.	form artificial respiration. Use first aid
5. FIRE-FIGHTING MEASURES		
Suitable extinguishing media:	Dry chemical, CO ₂ , water spray, or alcohol-resistant foam. C	consult with local fire authorities before

Specific hazards arising from the chemical

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Hazardous combustion products:	These products include: Carbon oxides
Other specific hazards:	Closed containers may explode from heat of a fire.

Special precautions for fire-fighters: Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when heated. Move containers from fire area if you can do it without risk.

attempting large scale fire fighting operations.

Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Personal protective equipment:	Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

Emergency procedures:

6. ACCIDENTAL RELEASE MEASURES

Prevent dust cloud. Do not clean-up or dispose except under supervision of a specialist. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. **Environmental precautions:**

Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE

Precautions for safe handling:	Avoid inhalation of vapor or mist. Do not ingest. Avoid contact with skin and eyes. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.
Conditions for safe storage:	Store locked up. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.
Storage incompatibilities:	Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:	
ACGIH TLV (TWA):	50 ppm
OSHA PEL (TWA):	100 ppm

Appropriate engineering controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment

Respiratory protection:	Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection:	Wear protective gloves.
Eye protection:	Safety glasses.
Skin and body protection:	Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Lump White - Almost white No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	22°C (Freezing point) (72°F) 155°C (311°F) No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log P _{ow})	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	68°C (154°F) No data available	Autoignition temperature: Flammability or explosive limits: Lower: No data avai	No data available lable
		Upper: No data avai	lable

Solubility(ies):

10. STABILITY AND REACTIVITY

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10. STABIL	ITY AND REACTIVITY				
Reactivity:		Not Available.			
Chemical St			mmended storage conditions	s. (See Section 7)	
Conditions t	f Hazardous Reactions:	Avoid excessive h	ctivity has been reported.		
Incompatible			Acid chlorides, Strong oxidizi	ng agents	
	Decomposition Products:	No data available		3 - 3	
11. TOXICO	OLOGICAL INFORMATIO	N			
Acute Toxic					
No data avail	able				
Skin corrosi	on/irritation:				
No data avail	able				
Serious eye	damage/irritation:				
No data avail	able				
Respiratory	or skin sensitization:				
No data avail					
Germ cell m	utagenicity:				
No data avail					
Carcinogeni	city:				
•	-				
No data avail	able				
IARC:	No data available	NTP:	No data available	OSHA:	No data available
Reproductiv No data avail					
Routes of Ex	nosuro.	Inhalation Evo co	ntact, Ingestion, Skin contac	+	
	elated to exposure:		maci, myesilon, skin contac	ι.	
Overexposure may result in serious illness or death. Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally					
	in contact may result in redne	ss, pain or dry skin. I	nhalation causes irritation of	the lungs and respirato	ry system.
Potential Health Effects: Skin and eye contact may result in irritation. Inhalation causes irritation of the lungs and respiratory system.					
Target organ(s):					
	rowsiness or dizziness.				

12. ECOLOGICAL INFORMATION

Ecotoxicity Fish: Crustacea: Algae:	No data available No data available No data available
Persistence and degradability: Bioaccumulative potential (BCF): Mobility in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc): Henry's Law: constant (PaM ³ /mol)	No data available No data available No data available No data available No data available No data available

13. DISPOSAL CONSIDERATIO	DNS	
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. 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. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.	
Disposal of container:	Dispose of as unused product. Do not re-use empty containers.	
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.	
14. TRANSPORT INFORMATIO	N	
DOT (US)	Non-hazardous for transportation.	
IATA	Non-hazardous for transportation.	
IMDG	Non-hazardous for transportation.	

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations

CERCLA Hazardous substat	nce and Reportable Quantity:
SARA 313:	Not Listed

SARA 302:	Not Listed

State Regulations

State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

Other Information

NFPA Rating:

IFPA Rating:		HMIS Classification:
Health:	2	Health:
Flammability:	2	Flammability:
Instability:	3	Physical:

International Inventories

WHMIS hazard class:

EC-No:

D2A: Materials causing other toxic effects. (Very Toxic) D2B: Materials causing other toxic effects. (Toxic) 209-688-9

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16. OTHER INFORMATION

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16. OTHER INFORMATION

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective gogles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.