

Revision number: 2 Revision date: 10/06/2014

IDENTIFICATION 1.

Product	name:
Product	code:

3-Cyclohexene-1-methanol C2435

Product use: **Restrictions on use:**

For laboratory research purposes. Not for drug or household 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	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
	+1-505-200-7024

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:	Flammable Liquids [Category 4]
Signal word:	Warning!
Hazard Statement(s):	Combustible liquid
Pictogram(s) or Symbol(s):	None
Precautionary Statement(s): [Prevention] [Response] [Storage] [Disposal]	Keep away from heat, sparks, open flames or other hot surfaces No smoking. Wear protective gloves, eye protection and face protection. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish. Store in well-ventilated place. Keep cool. 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)

TCI AMERICA

SAFETY DATA SHEET

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components:	Substance 3-Cyclohexene-1-methanol
Percent:	>98.0%(GC)
CAS Number:	1679-51-2
Molecular Weight:	112.17
Chemical Formula:	C7H12O
Synonyms:	1,2,3,6-Tetrahydrobenzyl Alcohol

4. FIRST-AID MEASURES

Inhalation:

Call emergency medical service. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4. FIRST-AID MEASURES			
Skin contact:	Call a poison center or doctor if you feel unwell. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.		
Eye contact:			
Ingestion:	If swallowed, seek medical advice immediately and show the container or label. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.		
Symptoms/effects:			
Acute: Delayed:	No data available No data available		
Immediate medical attention:	If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.		
5. FIRE-FIGHTING MEASURES			
Suitable extinguishing media:	Dry chemical, CO_2 , water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.		
Specific hazards arising from the cher			
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Closed containers may explode from heat of a fire.		
	y low flash point: Use of water spray when fighting fire may be inefficient. Use water spray or fog; do not use		

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. Use water spray or fog; do not use straight streams. Do not use straight streams. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Move containers from fire area if you can do it without risk.

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:	Use spark-proof tools and explosion-proof equipment. Remove all sources of ignition. 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:	Splash goggles. Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).
Emergency procedures:	Isolate area until gas has dispersed. 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). All equipment used when handling the product must be grounded. 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:

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: Do NOT breath gas, fumes, vapor, or spray. Avoid contact with skin and eyes. Keep away from heat and sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic charge. Good general ventilation should be sufficient to control airborne levels. 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.

7. HANDLING AND STORAGE Conditions for safe storage: Storage incompatibilities: 8. EXPOSURE CONTROLS / PER Exposure limits: Good general ventilation should be suff fountains should be provided in areas v engineering/laboratory practices when	Store and use away from he incompatibles. Containers w leakage. Avoid prolonged st Combustible substances, St SONAL PROTECTION No data available icient to control airborne levels. Ve where there is any possibility that w	at, sparks, open flame, or any other hich are opened must be carefully re orage periods. ore away from oxidizing agents	esealed and kept upright to prevent
Conditions for safe storage: Storage incompatibilities: 8. EXPOSURE CONTROLS / PER Exposure limits: Good general ventilation should be suff fountains should be provided in areas v engineering/laboratory practices when	Store and use away from he incompatibles. Containers w leakage. Avoid prolonged st Combustible substances, St SONAL PROTECTION No data available icient to control airborne levels. Ve where there is any possibility that w	at, sparks, open flame, or any other hich are opened must be carefully re orage periods. ore away from oxidizing agents	ignition source. Keep away from esealed and kept upright to prevent
8. EXPOSURE CONTROLS / PER Exposure limits: Appropriate engineering controls: Good general ventilation should be suff fountains should be provided in areas v engineering/laboratory practices when	SONAL PROTECTION No data available icient to control airborne levels. Ve	ntilation is normally required when h	
Exposure limits: Appropriate engineering controls: Good general ventilation should be suff fountains should be provided in areas v engineering/laboratory practices when	No data available icient to control airborne levels. Ve /here there is any possibility that w		
Appropriate engineering controls: Good general ventilation should be suff ountains should be provided in areas v engineering/laboratory practices when	icient to control airborne levels. Ve /here there is any possibility that w		
Good general ventilation should be suff fountains should be provided in areas v engineering/laboratory practices when	here there is any possibility that w		
	, , , , , , , , , , , , , , , , , , ,	orkers could be exposed to the subs	
Personal protective equipment			
Respiratory protection: Hand protection: Eye protection: Skin and body protection:	Vapor respirator. Be sure to Wear protective gloves. Splash goggles. Lab coat.	use a MSHA/NIOSH approved resp	irator or equivalent.
9. PHYSICAL AND CHEMICAL P	ROPERTIES		
Physical state (20°C): Form: Color: Odor: Odor threshold:	Liquid Clear Colorless - Almost colorless No data available No data available		
Boiling point/range: 1 Decomposition temperature: N Relative density: 0	lo data available 00°C (212°F)/3.3kPa lo data available .97 lo data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: N n-octanol/water (log P _{ow})	lo data available	Evaporation rate: (Butyl Acetate = 1)	No data available
	3°C (163°F) lo data available	Autoignition temperature: Flammability or explosive limits Lower: No data av	
		Upper: No data av	vailable
Solubility(ies):			
10. STABILITY AND REACTIVITY	/		
Reactivity:Not Available.Chemical Stability:Stable under recommendedPossibility of Hazardous Reactions:In use, may form flammable/Conditions to avoid:Avoid excessive heat and ligIncompatible materials:Oxidizing agentsHazardous Decomposition Products:No data available			
11. TOXICOLOGICAL INFORMA			

3-Cyclohexene-1-methanol	TCI AMERICA		Page 4 of 5
Acute Toxicity: No data available			
Skin corrosion/irritation: No data available			
Serious eye damage/irritation: No data available			
Respiratory or skin sensitization: No data available			
Germ cell mutagenicity: No data available			
Carcinogenicity:			
No data available			
IARC: No data available	NTP: No data a	vailable OSHA:	No data available
Reproductive toxicity: No data available			
Routes of Exposure: Symptoms related to exposure: No specific information is available in our d be kept to a minimum. Always follow safe i Potential Health Effects: No specific information available; skin and Target organ(s): 12. ECOLOGICAL INFORMATION	ndustrial hygiene practices and v	cts of this material for humans. Howeve wear proper protective equipment when	handling this compound.
For standally			
Ecotoxicity Fish:	No data available		
Crustacea:	No data available		
Algae:	No data available		
Persistence and degradability:	No data available		
	Nia data availabla		

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

13. DISPOSAL CONSIDERAT	TIONS
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 INFORMAT	TON
DOT (US)	Non-hazardous for transportation.
ΙΑΤΑ	Non-hazardous for transportation.
IMDG	Non-hazardous for transportation.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.): This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

CERCLA Hazardo	us substance an	nd Reportable Quantity:	
SARA 313:		Not Listed	
SARA 302:		Not Listed	
State Regulations	<u> </u>		
State Right-to-Kno	ow		
Massachus	setts	Not Listed	
New Jerse	у	Not Listed	
Pennsylva	nia	Not Listed	
California Propos	ition 65:	Not Listed	
Other Information			
NFPA Rating:		HMIS Classificatio	n:
Health:	0	Health:	0
Flammability:	2	Flammability:	2
Instability:	0	Physical:	0
International Inve	ntories		
WHMIS hazard cla	155.	B3: Combustible Liquid.	
Canada: NDSL		On NDSI	
EC-No:		216-847-6	
		2.3 011 0	

Revision date: 10/06/2014 **Revision number: 2**

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 gualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.