

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

1. IDENTIFICATION

Product name: Product code: 3-Methyl-3-buten-1-ol M0726

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:

Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A] Flammable Liquids [Category 3]

Signal word:

Warning!

Hazard Statement(s):

Causes serious eye irritation Causes skin irritation Flammable liquid and vapor

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Wash hands and face thoroughly after handling. Wear protective gloves. Wear eye and face protection. Keep away from heat, sparks, open flames or other hot surfaces. - No smoking. Keep container tightly closed. Ground or bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting, and equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves, eye protection and face protection. 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 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 or attention. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish. Store in a 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)

Hazards not otherwise classified: [HNOC] May be harmful if swallowed.

For laboratory research purposes. Not for drug or household use.

TCI AMERICA

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components:	Substance 3-Methyl-3-buten-1-ol
Percent:	>98.0%(GC)
CAS Number:	763-32-6
Molecular Weight:	86.13
Chemical Formula:	C₅H ₁₀ O

4. FIRST-AID MEASURES

Inhalation:	Call a poison center or doctor if you feel unwell. 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
Skin contact:	take precautions to protect themselves. Call a poison center or doctor if you feel unwell. Remove and wash contaminated clothing before re-use. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that
Eye contact:	medical personnel are aware of the material(s) involved and take precautions to protect themselves. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. 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)
Ingestion:	involved and take precautions to protect themselves. Do not induce vomiting with out medical advice. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. 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:	Redness. 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 chem	ical
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Closed containers may explode from heat of a fire.
have a very low flash point: Use of water s	t streams. Dike fire-control water for later disposal; do not scatter the material. CAUTION: All these products spray when fighting fire may be inefficient. Do not use straight streams. Runoff to sewer may create fire or e when heated. Move containers from fire area if you can do it without risk. ghters:

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. 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:	Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures: Isola

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.
Conditions for safe storage:	Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition source. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.
Storage incompatibilities:	Combustible substances, Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No data available

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. 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:Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.Hand protection:Wear protective gloves.Eye protection:Splash goggles.Skin and body protection:Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Liquid Clear Colorless - Very pale yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	No data available 130°C (266°F) No data available 0.85 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 Pow)	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	42°C (108°F) No data available	Autoignition temper Flammability or expl Lower: Upper:	

Solubility(ies):

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reac Conditions to avoid: Incompatible materials: Hazardous Decomposition Pro	tions: In u Avc Stro			ction 7)	
11. TOXICOLOGICAL INFO	RMATION				
RTECS Number: EM9473100					
Acute Toxicity: orl-rat LD50:3652 mg/kg			ipr-rat LD50:1160 mg/kg		
Skin corrosion/irritation: No data available					
Serious eye damage/irritation: No data available					
Respiratory or skin sensitizati No data available	on:				
Germ cell mutagenicity: No data available					
Carcinogenicity:					
No data available					
IARC: No data available		NTP:	No data available	OSHA:	No data available
Reproductive toxicity: No data available					

Routes of Exposure:

Inhalation, Eye contact, Ingestion, Skin contact.

Symptoms related to exposure:

Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally blistering. Skin contact may result in redness, pain or dry skin. Eye contact may result in redness or pain. Overexposure may result in serious illness or death. Potential Health Effects:

Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Overexposure may result in serious illness or death. **Target organ(s):** No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity Fish: Crustacea: Algae:	No data available No data available No data available
Persistence and degradability:	No data available
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)	

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	CONSIDERATIONS				
Disposal of product: Disposal of container: Other considerations:		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.			
		Observe all fede	Dispose of as unused product. Do not re-use empty containers. Observe all federal, state and local regulations when disposing of the substance.		
14. TRANSPOR	T INFORMATION				
DOT (US) UN number: UN1987	Proper Shipping N Alcohols, n.o.s.	lame:	Class or Division: 3 Flammable liquid	Packing Group: 	
I ATA UN number: UN1987	Proper Shipping N Alcohols, n.o.s.	lame:	Class or Division: 3 Flammable liquid	Packing Group: 	
IMDG UN number: UN1987	Proper Shipping N Alcohols, n.o.s.	lame:	Class or Division: 3 Flammable liquid	Packing Group:	
EmS number:		F-E, S-D			
Toxic Substance (Control Act (TSCA 8b.)				
Toxic Substance (This product is ON US Federal Regula	Control Act (TSCA 8b.) the EPA Toxic Substar ations us substance and Rep	nces Control Act (TS	SCA) inventory.		
Toxic Substance (This product is ON US Federal Regula CERCLA Hazardo SARA 313: SARA 302: State Regulations	Control Act (TSCA 8b.) the EPA Toxic Substar ations us substance and Rep	nces Control Act (TS portable Quantity: Not Listed	SCA) inventory.		
Toxic Substance (This product is ON US Federal Regula CERCLA Hazardo SARA 313: SARA 302:	Control Act (TSCA 8b.) the EPA Toxic Substar ations us substance and Rep - - - - - - - - - - - - - - - - - - -	nces Control Act (TS portable Quantity: Not Listed	SCA) inventory.		
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Toxic Substance (This product is ON US Federal Regula CERCLA Hazardo SARA 313: SARA 302: State Regulations State Right-to-Kno Massachus New Jerse Pennsylva California Proposi Other Information NFPA Rating: Health: Flammability:	Control Act (TSCA 8b.) the EPA Toxic Substan ations us substance and Rep bw setts y nia ition 65:	nces Control Act (TS portable Quantity: Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed	HMIS Classification: Health: Flammability:	2	
Toxic Substance of This product is ON US Federal Regula CERCLA Hazardo SARA 313: SARA 302: State Regulations State Right-to-Kno Massachus New Jerse Pennsylva California Proposi Other Information NFPA Rating: Health: Flammability: Instability:	Control Act (TSCA 8b.) the EPA Toxic Substan ations us substance and Rep bw setts y nia ition 65:	nces Control Act (TS portable Quantity: Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed	HMIS Classification: Health: Flammability: Physical:	2 0	
Toxic Substance (This product is ON US Federal Regula CERCLA Hazardo SARA 313: SARA 302: State Regulations State Right-to-Kno Massachus New Jerse Pennsylva California Proposi Other Information NFPA Rating: Health: Flammability: Instability:	Control Act (TSCA 8b.) the EPA Toxic Substan ations us substance and Rep bw setts y nia ition 65:	nces Control Act (TS portable Quantity: Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed	HMIS Classification: Health: Flammability: Physical:	2 0	

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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.