

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

## 1. IDENTIFICATION

Product name: Product code: 1-Methylbenzimidazole M2173

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:	Not classifiable
Signal word:	None
Hazard Statement(s):	None
Pictogram(s) or Symbol(s):	None
Precautionary Statement(s):	None

Supplementary Information:

While this material is not classified as hazardous under OSHA, this SDS contains valuable information critical to safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components:	Substance 1-Methylbenzimidazole
Percent:	>98.0%(GC)(T)
CAS Number:	1632-83-3
Molecular Weight:	132.17
Chemical Formula:	$C_8H_8N_2$

## 4. FIRST-AID MEASURES

Inhalation:	Move victim to fresh air. Call emergency medical service. 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.
Skin contact:	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 medical personnel are aware of the material(s) involved and take precautions to protect themselves.

For laboratory research purposes. 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

Eye contact:		
4. FIRST-AID MEASURES   Eye contact: Move victim to fresh air. Check for and remove any contact lenses. In case of contact with immediately flush eyes with running water for at least 20 minutes. Keep victim warm and symptomatically and supportively. Effects of exposure to substance may be delayed. Ensight personnel are aware of the material(s) involved and take precautions to protect themselve. If a person vomits place them in the recovery position so that vomit will not reenter the m Rinse mouth. Keep victim warm and quiet. Loosen tight clothing such as a collar, tie, belt swallowed, seek medical advice immediately and show the container or label. Treat symptic supportively. Effects of exposure (ingestion) to substance may be delayed.		
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 ch	emical	
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Nitrogen oxides Closed containers may explode from heat of a fire.	
Special precautions for fire-fighters:		
Not available		
Special protective equipment for fire	-fighters: ng provides limited protection in fire situations ONLY; it may not be effective in spill situations.	
6. ACCIDENTAL RELEASE MEA	SURES	
Personal precautions:	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8).	
Personal protective equipment: Emergency procedures:	Wear protective clothing, gloves and eye protection. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution.	
Methods and materials for containm		
Dike far ahead of liquid spill for later dis Environmental precautions:	sposal.	
Dike far ahead of liquid spill for later dis Environmental precautions: Prevent entry into sewers, basements o	sposal.	
Dike far ahead of liquid spill for later dis Environmental precautions: Prevent entry into sewers, basements of 7. HANDLING AND STORAGE	sposal. or confined areas. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. Follow safe industrial hygiene practices and always wear proper protective equipment when	
Dike far ahead of liquid spill for later dis Environmental precautions: Prevent entry into sewers, basements of 7. HANDLING AND STORAGE Precautions for safe handling:	sposal. or confined areas. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound. Keep container tightly closed in a dry and well-ventilated place. Store under inert gas (e.g. Argon). Store in	
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Respiratory protection Hand protection: Eye protection: Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves. Safety glasses.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Skin and body protection: Lab coat.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Powder White - Very pale reddish ye No data available No data available	ellow	
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	59°C (138°F) 154°C (309°F)/1.6kPa 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 Pow)	1.38	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	No data available No data available	Autoignition temper Flammability or exp Lower: Upper:	

Solubility(ies): Soluble: Methanol

### 10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products: Not Available. Stable under recommended storage conditions. (See Section 7) No hazardous reactivity has been reported. Air sensitive. Exposure to air. Heat sensitive. Strong oxidizing agents No data available

### 11. TOXICOLOGICAL INFORMATION

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

Reproductive toxicity: No data available

**Routes of Exposure:** 

Inhalation, Eye contact, Ingestion.

No data available

NTP:

OSHA: No data available

### 1-Methylbenzimidazole

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## Symptoms related to exposure:

No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. **Potential Health Effects:** 

No specific information available; skin and eye contact may result in irritation. May be harmful if inhaled or ingested. **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: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow)	No data available No data available No data available 1.38
Soil adsorption (Koc): Henry's Law: constant (PaM <sup>3</sup> /mol)	No data available No data available

13. DISPOSAL CONSIDERATIONS			
Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State rules and regulations. You may be able to dissolve or mix material with a combustible solvent chemical incinerator equipped with an afterburner and scrubber system. This section is intend assistance but does not replace these laws, nor does compliance in accordance with this sect regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Waste are listed in 40 CFR Parts 261.			
Disposal of container:	Dispose of as unused product.		
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.		
14. TRANSPORT INFORMATION			
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 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 substance 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

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15. REGULATOR Other Information		RMATION			
NFPA Rating:			HMIS Classification:		
Health:	2		Health:	2	
Flammability:	0		Flammability:	0	
Instability:	0		Physical:	0	
International Inver	ntories				
WHMIS hazard cla	ISS:	No data available.			
16. OTHER INFO	ORMATIC	DN			

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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 goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.