

Hefei TNJ Chemical Industry Co.,Ltd. B911 Xincheng Business Center, Qianshan Rd. Hefei 230022 China Tel : (0086) 551 65418695 Fax: (0086) 551 65418697 Email: info@tnjchem.com Site: www.tnjchem.com

Material Safety Data Sheet

Dimethyl fumarate

Section 1: Chemical Product and Company Identification						
Product Name: Dimethyl fumarate						
Catalog Codes: Not available.						
CAS#: 624-49-7						
RTECS: Not available.						
TSCA: Not available.						
CI#: Not available.						
Synonym: Fumaric Acid, Dimethyl Ester; Allomaleic Acid Dimethyl Ester						
Chemical Name: Not available.	Chemical Name: Not available.					
Chemical Formula: C6H8O4						
Contact Information for Emergency: (0086) 551 65418681						
Hefei TNJ Chemical Industry Co.,Ltd.						
B911 Xincheng Business Center	Tel :	(0086) 551 65418695				
Qianshan Road, Hefei	Fax:	(0086) 551 65418697				
230004Anhui	Email:	info@tnjchem.com				
China	Site:	www.tnjchem.com				

Section 2: Composition and Information on Ingredients					
Composition:					
Name	CAS #	% by Weight			
Dimethyl fumarate	624-49-7	100			
Toxicological Data on Ingredients:					
Dimethyl fumarate LD50: Not available. LC50: Not available.					

Section 3: Hazards Identification

Appearance: white crystalline powder.

Warning: Causes severe eye irritation and possible eye injury. May be harmful if absorbed through the skin. Causes skin irritation. May cause digestive tract irritation with nausea, vomiting, and diarrhea. May cause respiratory tract irritation.

Target Organs: None.

Potential Health Effects

Eye: Contact produces irritation, tearing, and burning pain. Causes severe eye irritation and possible injury. **Skin:** Causes skin irritation. May be harmful if absorbed through the skin. May cause reddening of the skin. **Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: Inhalation of dust may cause respiratory tract irritation.

Chronic: No information found.

Section 4: First Aid Measures

Eyes: Get medical aid. Gently lift eyelids and flush continuously with wate r. Extensive irrigation with water is required (at least 30 minutes).

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

Section 5: Fire and Explosion Data

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower:N/A

Upper: N/A

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6: Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7: Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Keep container closed when not in use. Keep containers tightly closed.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Dimethyl Fumarate	none listed	none listed	none listed

OSHA Vacated PELs: Dimethyl Fumarate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear safety glasses and chemical goggles if splashing is possible. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9: Physical and Chemical Properties

Physical State: Crystalline powder
Appearance: white
Odor: None reported.
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: 5.0
Evaporation Rate:Not available.
Viscosity: Not available.
Boiling Point: 192.0 - 193.0 deg C @ 760.00m
Freezing/Melting Point:103.00 - 104.00 deg C

Decomposition Temperature:Not available. Solubility: Not available. Specific Gravity/Density:Not available. Molecular Formula:C6H8O4 Molecular Weight:144.13

Section 10: Stability and Reactivity Data

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials: Acids - bases - oxidizing agents - reducing agents.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11: Toxicological Information

RTECS#:

CAS# 624-49-7: EM6125000 LD50/LC50:

CAS# 624-49-7:

Draize test, rabbit, eye: 250 ug/24H Severe;

Draize test, rabbit, skin: 20 mg/24H Moderate;

Oral, rat: LD50 = 2240 mg/kg;

Skin, rabbit: LD50 = 1250 mg/kg;

Carcinogenicity:

CAS# 624-49-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies: No information available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal :

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

US FEDERAL

TSCA

CAS# 624-49-7 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 624-49-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 21 Harmful in contact with skin. R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 36/37/39 Wear suitable protective clothing, gloves and eye/face pr otection.

WGK (Water Danger/Protection)

CAS# 624-49-7: No information available.

Canada - DSL/NDSL

CAS# 624-49-7 is listed on Canada's DSL List.

Canada - WHMIS

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

Section 16: Other Information

References: Not available. Other Special Considerations: Not available. Created: 10/09/2005 06:31 PM Last Updated: 05/21/2016 12:00 PM

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we m be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.