



MATERIAL SAFETY DATA SHEET

Oxalic Acid Dihydrate

Section 1 - Chemical Product and Company Identification

MSDS Name:	Oxalic acid dihydrate
Synonyms:	Ethanedionic acid
Company Identification:	Hazel Mercantile Limited
Company Identification: (INDIA)	701/712 A, Embassy Centre, Nariman Point, Mumbai - 400 021.
For information in the INDIA, call:	+91 - 22 - 2282 4444 (50 Lines)

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
6153-56-6	Ethanedionic acid, dihydrate	>99%	205-634-3		

Text for R-phrases: see Section 16

Hazard Symbols:	XN
	
Risk Phrases:	21/22

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful in contact with skin and if swallowed.

Potential Health Effects

Eye:	Causes eye burns. Causes redness and pain.
Skin:	Harmful if absorbed through the skin. Causes skin burns. Causes redness and pain.
Ingestion:	Harmful if swallowed. Causes gastrointestinal tract burns. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May cause hemorrhaging of the digestive tract.
Inhalation:	May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation. Causes chemical burns to the respiratory tract. May be harmful if inhaled.
Chronic:	May cause liver and kidney damage.



Section 4 - First Aid Measures

Eyes:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin:	Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion:	Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.
Inhalation:	Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Notes to Physician:	Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Extinguishing Media:	Use foam, dry chemical, or carbon dioxide. Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:	Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling:	Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.
Storage:	Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

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 ventilation to keep airborne concentrations low.
Exposure Limits	
	CAS# 144-62-7:
	United Kingdom, WEL - TWA: 1 mg/m3 TWA United Kingdom, WEL - STEL: 2 mg/m3 STEL
	United States OSHA: 1 mg/m3 TWA
	Belgium - TWA: 1 mg/m3 VLE Belgium - STEL: 2 mg/m3 VLE
	France - VME: 1 mg/m3 VME
	Germany: 1 mg/m3 TWA (inhalable fraction) Germany: skin notation
	Malaysia: 1 mg/m3 TWA
	Netherlands: 1 mg/m3 MAC
	Spain: 1 mg/m3 VLA-ED Spain: 2 mg/m3 VLA-EC
	CAS# 6153-56-6:
Personal Protective Equipment	
Eyes:	Wear chemical splash goggles.
Skin:	Wear appropriate protective gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to prevent skin exposure.



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.
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Section 9 - Physical and Chemical Properties

Physical State:	Crystalline powder
Color:	white
Odor:	odorless
pH:	1.3 (0.1M aq. solution)
Vapor Pressure:	21.5mbar @50 deg C
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	98 - 102 deg C
Autoignition Temperature:	Not available
Flash Point:	Not available
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
Decomposition Temperature:	
Solubility in water:	138 g/l (20°C)
Specific Gravity/Density:	
Molecular Formula:	C2H2O4.2H2O
Molecular Weight:	126.04

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Incompatible materials, temperatures above 150°C, exposure to moist air or water.
Incompatibilities with Other Materials	Metals, strong oxidizing agents, strong oxidizing agents, strong bases, acid chlorides, sodium chlorate, sodium hypochlorite, steel, mercury, silver, sodium chloride, chlorites.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide, formic acid.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 144-62-7: RO2450000 CAS# 6153-56-6: None listed
LD50/LC50:	RTECS: CAS# 144-62-7: Draize test, rabbit, eye: 250 ug/24H Severe; Draize test, rabbit, skin: 500 mg/24H Mild; Oral, rat: LD50 = 7500 mg/kg; RTECS: CAS# 6153-56-6: Other: Oral, rat: LD50 = 375 mg/kg Skin, rabbit: LD50 = 2000 mg/kg
Carcinogenicity:	Oxalic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. Ethanedioic acid, dihydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.



Section 12 - Ecological Information

Ecotoxicity:	Fish: Leuciscus idus: 160 mg/L; 48H; LC50
	Fish: Bluegill/Sunfish: 4000 mg/kg; 24H; LC50
	Fish: Mosquito Fish: 1350 mg/kg; 24H; LC50
	Daphnia: Daphnia: 136.9 mg/L; 48H; EC50

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	CORROSIVE SOLID, TOXIC, N.O.S.*	CORROSIVE SOLID, TOXIC, N.O.S.	CORROSIVE SOLID, TOXIC, N.O.S.
Hazard Class:	8 (6.1)	8 (6.1)	8 (6.1)
UN Number:	2923	2923	2923
Packing Group:	II	II	II

Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
➤ R 21/22 Harmful in contact with skin and if swallowed
Safety Phrases:
➤ S 24/25 Avoid contact with skin and eyes.
WGK (Water Danger/Protection)
➤ CAS# 144-62-7: 1
➤ CAS# 6153-56-6: 1
Canada
➤ CAS# 144-62-7 is listed on Canada's DSL List
US Federal
➤ TSCA
➤ CAS# 144-62-7 is listed on the TSCA Inventory.
➤ CAS# 6153-56-6 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR720.3(u)(2)).

Section 16 - Other Information

MSDS Creation Date:	October 15, 2007
Revision #0 Date	

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 the company 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 the company has been advised of the possibility of such damages