Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

SAFETY DATA SHEET

MALONIC ACID

SECTION 1: Identification of the substance/mixture and of the company/undertaking Trade name:

1.1 Product identifier:	
CAS Number:	141-82-2
EC number:	205-503-0
1.2 SYNONYMS:	• Propane-1,2-dicarboxylic acid • 2-Propane-dicarboxylic acid • Methylmalonic acid • Malonic acid dihydrate • Dimethylmalonic acid • Carboxymethylacetic acid

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008 Skin corrosion/damage (category 2) Serious Eye Damage/Eye Irritation (Category 2A) Specific Target Organ Toxicity – Single Exposure (Category 3)
Hazard Pictograms:	
Signal Word:	Danger
Hazard statements:	**H315:** Causes skin irritation. **H319:** Causes serious eye irritation. **H335:** May cause respiratory irritation**.**
Precautionary Statements:	**P102:** Keep out of reach of children. **P260:** Do not breathe dust, vapors, or spray. **P264:** Wash hands thoroughly after handling.

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

	P280: Wear protective gloves, protective clothing, eye protection, and face protection. **P301+P312:** IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. **P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. **P304+P340:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. **P333+P313:** If skin irritation or rash occurs: Get medical attention. **P501:** Dispose ofcontents/container in accordance with local/regional/national/international regulations.
2.3 Other hazards:	
Inhalation:	vapors can cause respiratory irritation, coughing, and discomfort, and prolonged exposure may lead to more severe respiratory effects.
Ingestion:	can cause irritation to the gastrointestinal tract, leading to symptoms such as nausea, vomiting, abdominal pain, and diarrhea.
Skin Contact:	can cause irritation, redness, and discomfort, and prolonged exposure may lead to more severe skin damage.
Eye contact:	can cause severe irritation, redness, pain, and potential eye damage.
Chronic Exposure:	may lead to prolonged irritation of the skin, eyes, or respiratory system, and could potentially cause long-term damage to these tissues with repeated or prolonged contact.

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

Aggravation of pre-existing conditions:	may aggravate pre-existing skin conditions, respiratory disorders (such as asthma), or eye conditions.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 141-82-2 MALONIC ACID
Identification number(s):	EC number: 205-503-0

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
After skin contact:	Remove contaminated clothing. Wash with soap and water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion. Give lots of water to drink. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.,
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Carbon dioxide. Water spray. Alcohol-resistant foam. Dry chemical.
5.2 Special hazards arising from the substance or mixture:	Carbon oxides.
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device . Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed
	Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.

General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required
Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information	
Appearance: Form:	Powder
Colour:	White
Odour:	No data available
pH-value:	No data available
Melting point/Melting range:	134-135°C
Boiling point/Boiling range:	135°C
Flammability (solid, gaseous):	No data available
Ignition temperature:	No data available
Decomposition temperature:	No data available
Self-igniting:	No data available
Flash point:	No data available
Danger of explosion:	No data available
Explosion limits: Lower:	No data available
Explosion limits: Upper:	No data available
Vapour pressure:	No data available
Density at 20 °C:	1.6 kg/m^3.
Relative density:	1.6
Vapour density:	No data available

Evaporation rate:	No data available
Solubility in / Miscibility with- ·water at 20 °C:	Highly soluble
Partition coefficient:(n-octanol/water)	No data available
Viscosity:	No data available
9.2 other information	
Bulk density	0.95 g/l

SECTION 10: Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	No data available
10.4 Conditions to avoid	Excessive heat, strong oxidizers, strong bases, moisture.
10.5 Incompatible materials	Bases, Oxidizing agents, Reducing agents.
10.6 Hazardous decomposition products	Carbon monoxide, Carbon dioxide, Acrolein.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	**LD50** (Oral, Rat) : 1310 mg/kg (4hr) **LD50** (Dermal, Rabbit) : no data available **LC50** (Inhalation Rat) : 8.989 mg/m^3 (1hr)
Skin corrosion/Irritation:	Mild skin irritation(rabbit) (24hr)
Serious eye damage/irritation:	severe irritation and burns of the eyes.(rabbit)
Respiratory damage/irritation:	Harmful if inhaled. Causes chemical burns to the respiratory tract.
Ingestion:	Harmful if swallowed. Causes gastrointestinal tract burns
Germ cell mutagenicity:	Genotoxicity in vivo - rat - Oral
Carcinogenicity:	Not applicable

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	
Biodegradability:	Readily biodegradable.

SECTION 12: Ecological information

12.1 Toxicity **Aquatic toxicity:**	LC50(Lepomis macrochirus): 150 mg/l (24h)
12.2 Persistence and degradability:	Readily biodegradable but not persistent in environment.
12.3 Bioaccumulative potential:	Low bioaccumulative potential
12.4 Mobility in soil:	Low mobility in soil
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging **Recommendation:**	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Mild Soap and Water, acetic acid (diluted) or citric acid (diluted) sodium bicarbonate

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	1606
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	Malonic acid
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	8
14.4 Packing group · ADR, IMDG, IATA:	3

Multichem Specialities Pvt. Ltd.
1215, Dalamal Tower,
Nariman Point, Mumbai 400021, India
T: +91 2243432121
E: multichem@multichemindia.com
www.multichemindia.com

14.5 Environmental hazards:	No data available
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is not classified in listed substance.
Named dangerous substances:	This substance is not listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out.

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.