Material Safety Data Sheet

Malonic Acid (RXSOL-95-1781-005)

1. Product and Company Identifaction

Product Name	: Malonic Acid
Part Number	: RXSOL-19-1781-025

Company Details:
RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Chennai, Kandla, Kolkata, Visakhapatnam, Fujairah, Muscat, Nairobi

Phone	+91 22 20871200-1400
Fax	+91 22 20871500 :::AOH :0091 9821214367
Email	**123@rxmarine.com**
Website	**www.rxmarine.com**

2. Composition / informationon ingredients

Name of Substance	Cas Number	EINECS No	Wt.%	Symbol
Propanedioic acid	141-82-2	205-503-0	104,06 g/mol	C3H4O4

3. Hazards Identification

Signal Word	Danger.
Hazard Statements	Causes serious eye damage.
Classification	Classification according to Regulation (EC) No 1272/2008 Serious eye damage (Category 1), H318
Additional information	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Precautionary statements -	P280 Wear eye protection/ face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

4. First Aid Measures

General advice	Show this material safety data sheet to the doctor in attendance.
Eye Contact	Rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
Skin Contact	Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Inhalation	fresh air.
Effects	The most important known symptoms and effects are described in the labelling.
Notes to Physicians	Immediately make victim drink water (two glasses at most). Consult a physician.

5. Fire-fighting Measures

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.Water Foam Carbon dioxide (CO2) Dry powder.
Extinguishing media which must not be used for safety reasons	For this substance/mixture no limitations of extinguishing agents are given.For this substance/mixture no limitations of extinguishing agents are given.
Special exposure hazards arising from the substance itself, combustion products, resulting gases:	Carbon oxides, Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.
Special protective equipment for fire-fighters	In the event of fire, wear self-contained breathing apparatus.
Additional information	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental Release Measures

Personal precautions, protectiveequipment and emergency procedures	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
Enviromental Precaution	Do not let product enter drains.
Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

7. Handling and Storage

Advice on safe handling	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.
Storage	Tightly closed. Dry. Non Combustible Solids.
Advice on general	Apart from the uses mentioned in other specific uses are stipulated.

8. Exposure controls and personal protection

Engineering Control	Ingredients with workplace control parameters.
Personal Protection	Eye protection :Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles. Skin protection : 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 and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Body Protection: protective clothing. Respiratory protection :required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P2 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
Exposure Limits	Do not let product enter drains.
Additional information	Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.



Gloves



Suit

9. Physical and chemical properties

Form	powder
Colour	white white
Odour	odorless
Boiling point and boiling range	215 °C at 18,66 hPa (decomposition)
Flash Point	157 °C - c.c.
Freezing Point	Melting point/range: 132 - 135 °C - dec.
pH	No data available
Evaporation rate	No data available
Flammability (solid, gas)	The product is not flammable. - Flammability (solids)
Upper explosion limit	No data available
Lower explosion limit	No data available
Explosive properties	No data available
Vapor pressure	0,002 hPa at 25 °C
Relative vapor density	No data available
Relative density	1,03 at 20 °C - Regulation (EC) No. 440/2008, Annex, A.3

Water solubility	766 g/l at 20 °C - Regulation (EC) No. 440/2008, Annex, A.6
Solubility in other solvents	No data available
Partition coefficient: octanol	log Pow: -0,81 - Bioaccumulation is not expected., (Lit.)
Autoignition temperature	No data available
Thermal decomposition	No data available
Viscosity, kinematic	No data available
Explosive properties	No data available
Oxidizing properties	None
Molecular weight	No data available
VOC	No data available

10. Stability and reactivity

Recativity	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Stability	The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	Violent reactions possible with: alkalines Strong oxidizing agents
Incompatible materials	Bases, Oxidizing agents, Reducing agents.
Hazardous Decomposition	In the event of fire.
Condition to Avoid	Strong heating.

11. Toxicological information

Route of Exposure	Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.
Eyes	Causes serious eye damage.
Skin	No skin irritation
Acute oral toxicity	LD50 Oral - Rat - male - 3.250 mg/kg (OECD Test Guideline 401) Symptoms: Possible damages:, mucosal irritations Dermal: No data available.LD50 Oral - Rat - male - 3.250 mg/kg (OECD Test Guideline 401) Symptoms: Possible damages:, mucosal irritations Dermal: No data available
Additional information	The substance/mixture does not contain, components considered to have endocrine, disrupting, properties according to REACH Article, 57(f) or Commission Delegated regulation (EU), 2017/2100 or, Commission Regulation (EU), 2018/605 at levels of 0.1% or higher.Repeated dose toxicity - Rat - male - Oral - 52 Days - NOAEL (No observed adverse effect level) - 100 mg/kg.

12. Ecological information

Toxicity to fish	flow-through test LC50 - Oryzias latipes - > 95,4 mg/l - 96 h
Toxicity to daphnia and others	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
Toxicity to algae	static test ErC50 - SELENASTRUM - > 998 mg/l - 72 h
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available

Results of PBT and vPvB	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Additional information	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

13. Disposal considerations

Waste Disposal	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

Hazard Pictograms:

UN Number	--
Proper shipping name	ADR/RID: Not dangerous goods, IMDG: Not, dangerous goods, IATA: Not dangerous goods
Transport hazard class(es) 8	
ADR/RID	No
Subsidiary risk IMDG	--
Subsidiary risk IATA	--
Packing group	
Packing group	--
Environmental hazards	
Environmental hazards	No
Marine pollutant	No
ADR/RID	
Hazard ID	--
Tunnel Category	--
IMDG	
EmS Code	--
IATA	
Packing Instruction (Cargo)	--
Maximum quantity	--
Packing Instruction (Passenger)	--
Maximum quantity	--

15. Regulatory information

Regulations	Take note of Dir 94/33/EC on the protection of young people at work.
Chemical safety assessment	For this product a chemical safety assessment was not carried out.
Further information	This material safety data sheet complies with the requirements of Regulation (EC) No.1907/2006.

16. Other information

Other Information	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 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 Rx Marine International has been advised of the possibility of such damages.