

1. Product and Company Identification

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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

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2. Composition / Information on ingredients

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Synonyms : Propanedioic acid

Formula : C₃H₄O₄

Molecular weight : 104,06 g/mol

CAS-No. : 141-82-2

EC-No. : 205-503-0

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

3. Hazards Identification

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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

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General advice	Show this material safety data sheet to the doctor in a
Eye Contact	Rinse out with plenty of water. Immediately call in o
Skin Contact	Take off immediately all contaminated clothing. Rinse
Inhalation	fresh air.
Effects	The most important known symptoms and effects are
Notes to Physicians	Immediately make victim drink water (two glasses at

5. Fire-fighting Measures

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Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical d dioxide (CO2) Dry powder.
Extinguishing media which must not be used for safety reasons	For this substance/mixture no limitations of extinguishing substance/mixture no limitations of extinguishing agents a
Special exposure hazards arising from the substance itself, combustion products, resulting gases:	Carbon oxides, Combustible. Vapors are heavier than explosive mixtures with air on intense heating. Develop vapours possible in the event of fire.
Special protective equipment for fire-fighters	In the event of fire, wear self-contained breathing appara
Additional information	Prevent fire extinguishing water from contaminating surf

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Avoid inhalatio Ensure adequate ventilation. Evacuate the danger expert. Do not let product enter drains. Cover drains. Collect, bind, and pump off spills. Ob Dispose of properly. Clean up affected area. Avoid g
Enviromental Precaution	
Methods and materials for containment and cleaning up	
Personal precautions, protective equipment 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.	
For personal protection see section 8.	
6.2 Environmental precautions	
Do not let product enter drains.	
6.3 Methods and materials for containment and cleaning up	
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.	
6.4 Reference to other sections	
For disposal see section 13.	

7. Handling and Storage

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Advice on safe handling

Storage

Advice on general

Do not ingest. Do not get in eyes, on skin, or on clothing. Do not spray. Use only with adequate ventilation. Wash hands thoroughly after use. Keep container tightly closed. Dry. Non Combustible Solids. Apart from the uses mentioned in other specific uses.

8. Exposure controls and personal protection

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Engineering Control

Personal Protection

Ingredients with workplace control parameters.

Eye protection :Use equipment for eye protection to meet the standards such as NIOSH (US) or EN 166(EU). Tighten the straps with gloves. Gloves must be inspected prior to use. Do not touch the touching glove's outer surface) to avoid skin contact. After use, wash after use in accordance with applicable laws and good practice. Selected protective gloves have to satisfy the specifications of standard EN 374 derived from it. Body Protection: Wear protective clothing when dusts are generated. Our recommendations are based on the following standards: DIN EN 143, DIN 14387 and DIN 14388. Use a respiratory protection system. Recommended Filter: P3. Follow the instructions that maintenance, cleaning and testing of respiratory protection system. Recommended Filter: P3. Follow the instructions of the producer. These measures have to be taken.

Exposure Limits

Do not let product enter drains.

Additional information

Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break strength: 10 N/cm² Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) data source: (0)6659 87300, e-mail sales@kcl.de, test method: EN 374-2:2013. For substances, and under conditions which differ from the above, gloves. This recommendation is advisory only and must be confirmed by an officer familiar with the specific situation of anticipated use, as offering an approval for any specific use scenario.



Gloves Suit

9. Physical and chemical properties

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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

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Reactivity	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

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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

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Toxicity to fish	flow-through test LC50 - Oryzias latipes - > 95,4 mg/l
Toxicity to daphnia and others	static test EC50 - Daphnia magna (Water flea) - > 95,4 mg/l
Toxicity to algae	static test ErC50 - SELENASTRUM - > 998 mg/l
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 persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).
Additional information	The substance/mixture does not contain components of very high concern according to REACH Article 57(f) or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

13. Disposal considerations

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Waste Disposal	See www.retrologistik.com for processes regarding disposal. Please contact us there if you have further questions.
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14. Transport information

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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)	--

15. Regulatory information

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Regulations

Take note of Dir 94/33/EC on the protection of

Chemical safety assessment

For this product a chemical safety assessment w

Further information

This material safety data sheet complies with th

Regulation (EC) No.1907/2006.

16. Other information

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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.

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