Material Safety Data Sheet

Adipic Acid (RXSOL-19-3072-025)

1. Product and Company Identifaction

Product Name	Adipic Acid
Part Number	RXSOL-19-3072-025

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

Branch : Kandla , Surat, Mumbai, Chennai, Vizag, Kolkata, UAE & Oman

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Email	123@rxmarine.com
Website	www.rxmarine.com

2. Composition / informationon ingredients

Name of Substance	Cas Number	EC Number	Wight %
Adipic Acid	124-04-9	204-673-3	100%

3. Hazards Identification

Classification according to Regulation (EC) No	Eye irritation (Category 2), H319For the full text of the H-Statements mentioned in this Section, see Section 16.
Signal Word	Warning
Hazard Statements	None
Precautionary statements prevention	None
Precautionary statements response	None

4. First Aid Measures

General Advice	Show this material safety data sheet to the doctor in attendance.
Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Inhalation:	After inhalation: fresh air.
eye contact	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Flammability	May be combustible at high temperature.
Flash Point	CLOSED CUP: Higher than 93.3°C (200°F).
Suitable extinguishing media	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given
Special hazards arising from the substance or mixture	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.
Advice for firefighters	In the event of fire, wear self-contained breathing apparatus
Further information	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental Release Measures

Spillage	Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition sources. Call for assistance on disposal.
Personal Protection	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.
Enviromental Precaution	Do not let product enter drains..
Methods and materials for containment and cleaning	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.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Handling	For precautions see section 2.2.
Conditions for safe storage,including any incompatibilities	No data available

Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls and personal protection

Engineering Control	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Eye/face Protection: 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 and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory Protection : 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 exposure limits are exceeded or if irritation or other symptoms are experienced.
Other Protection Measure	Handle in accordance with good industrial hygiene and safety practice.
Exposure Limit	Not Available



Gloves



Suit

9. Physical and chemical properties

Form	Crystalline
Colour	White
Odour	Odourless
Odor Threshold	No data available
pH	2,7 at 23 g/l at 25 °C
Melting Point	Melting point/range: 151 - 154 °C
Boiling Point	265 °C at 133 hPa .
Flash Point	196 °C - closed cup
Evaporation Rate	No data available
Flammability (solid, gas)	May form combustible dust concentrations in air.
Explosive limits	No Data Available
Vapour pressure	0,097 hPa at 18,5 °C
Vapour Density	5,04
Specific Gravity	1.98 g/cm3 at 20 °C
Partition coefficient	log Pow: 0,081 at 25 °C - Bioaccumulation is not expected., (IUCLID)
Explosive properties	No data available
Solubility	Soluble in water 620 g/l at 20 °C
Ignition temperature	No information available.

10. Stability and reactivity

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	No data available
Conditions to avoid	Strong heating.
Incompatible materials	Strong oxidizing agents
Hazardous Polymerization	In the event of fire: see section 5

11. Toxicological information

Rout Of Entry	Inhalation. Ingestion.
Toxicity to Animal	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE Acute oral toxicity (LD50): 689 mg/kg [Rat].
Toxic Effects on Human	May cause damage to the following organs: upper respiratory tract. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung sensitizer).
Special Remarks on other Toxi Effects on Humans:	Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reation, which becomes evident upon re-exposure to this material. Eyes: Causes eye irritation. Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May cause chemical pneumonitis and pulmonary edema, inflammation, edema of bronchi and larynx. Chronic Potential Health Effects: Repeated or prolonged skin exposure may cause allergic reactions in sensitive individuals. Repeated or prolonged exposure by inhalation may affect respiration and metabolism.
Acute toxicity	LD50 Oral - Rat - male and female - 5.560 mg/kg (OECD Test Guideline 401) LC50 Inhalation - Rat - male and female - 4 h - > 7,7 mg/l (OECD Test Guideline 403) LD0 Dermal - Rabbit - male and female - 7.940 mg/kg Remarks: (ECHA)
Skin corrosion/irritation	Skin - Rabbit Result: slight irritation (OECD Test Guideline 404)
Serious eye damage/eye irritation	Eyes - Rabbit Result: Irritating to eyes. - 24 h (OECD Test Guideline 405)
Respiratory or skin sensitization	Maximization Test - Guinea pig Result: Does not cause skin sensitization
Germ cell mutagenicity	Ames test S. typhimurium Result: negative Chromosome aberration test in vitro fibroblast Result: negative In vitro mammalian cell gene mutation test Chinese hamster fibroblasts Result: negative
Carcinogenicity	IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
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
Additional Information	RTECS: AU8400000

12. Ecological information

Eco Toxicity	Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 97 mg/l -96 h Remarks: (ECOTOX Database) Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia magna (Water flea) - 46 mg/l - 48 h (OECD Test Guideline 202) Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 59 mg/l - 72 h (OECD Test Guideline 201) Toxicity to bacteria static test EC50 - activated sludge - 4.747 mg/l - 3 h (OECD Test Guideline 209)Not Available
Persistence and degradability	Biodegradability aerobic - Exposure time 30 d Result: 83 % - Readily biodegradable. (OECD Test Guideline 301D) Theoretical oxygen demand 1.423 mg/g Remarks: (IUCLID) Ratio BOD/ThBOD 36 % Remarks: (Lit.)
COD and BOD 5	Not Available
Products Biodegradation:	The methods for determining the biological degradability are not applicable to inorganic substances.
Mobility in soil	No data available
Results of PBT and vPvB assessment	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.
Other adverse effects	No data available

13. Disposal considerations

Waste treatment Method	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

UN Number	ADR/RID: - IMDG: - IATA: -
Proper shipping name	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
Hazard Class	ADR/RID: - IMDG: - IATA: -
Packing group	ADR/RID: - IMDG: - IATA: -TDG
Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user	ions for user N

15. Regulatory information

Fedral and State Regulation	Connecticut hazardous material survey.: Ammonium persulfate New Jersey: Ammonium persulfate TSCA 8(b) inventory: Ammonium persulfate
Other Regulation	Take note of Dir 94/33/EC on the protection of young people at work.
WHMIS (Canada)	CLASS C: Oxidizing material.
DSCL (EEC)	R8- Contact with combustible material may cause fire. R20/22- Harmful by inhalation and if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin. R42/43- May cause sensitization by inhalation and skin contact. S22- Do not breathe dust. S24- Avoid contact with skin. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37- Wear suitable gloves.
Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable
National legislation	Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

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 weassume 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.