Material Safety Data Sheet

Mono-2-Ethyl Hexyl Amine (RXSOL-19-1185-025)

1. Product and Company Identifaction

Product Name	: Mono-2-Ethyl Hexyl Amine
Part Number	: RXSOL-19-1185-025

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

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone	+91 22 20871200 - 1400
Fax	+91 22 2761 2100 :::AOH :0091 9821214367
Email	123@rxmarine.com
Website	www.rxmarine.com

2. Composition / informationon ingredients

Name of Substance	Cas Number	EC No	Wt.%	Symbol
Mono-2-Ethyl Hexyl Amine	104-75-6	203-233-8	100 %	Xi

3. Hazards Identification

Classification of the substance or mixture	Classification according to Regulation (EC) No 1272/2008 Flammable liquids Category 3 Acute toxicity (Oral) Category 4 Acute toxicity (Dermal) Category 3 Skin corrosion/irritation Category 1C Serious eye damage/eye irritation Category 1 Long-term aquatic hazard Category 3
Signal Word	Danger
Hazard Statements	H226-Flammable liquid and vapour. H302-Harmful if swallowed. H311-Toxic in contact with skin. H314-Causes severe skin burns and eye damage. H412-Harmful to aquatic life with long lasting effects.
Precautionary statements - prevention	P260-Do not breathe dusts or mists. P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminatedclothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing.Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: Rinse cautiously with water for several minutes. Remove contactlenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. P370+P378-In case of fire: Use dry chemical or dry sand to extinguish.
Other Hazard	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.

4. First Aid Measures

Eye Contact	Get medical attention immediately. Call a poison center or physician. Immediately flush the eye(s) continuously with lukewarm, gently flowing water for at least 20-60 minutes while holding the eyelid(s) open. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician
Skin Contact	Get medical attention immediately. Call a poison center or physician. Wash affected area with soap and mild detergent for at least 20 - 60 minutes. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
Ingestion:	Call a poison center or physician. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway
Note to Physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5. Fire-fighting Measures

Suitable extinguishing media	Dry powder Dry sand.
Unsuitable extinguishing media	Do not use water jet
Protective Equipment	Wear suitable fire fightin suit.
Specific hazards arising from the chemical	Carbon oxides, Nitrogen oxides (NOx), Combustible.
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathingapparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.
Enviromental Precaution	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up	Stop leak if without risk. Move containers from spill area. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. Handling and Storage

Advice on safe handling	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Takemeasures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash handsand face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust ifvapour or aerosol will be generated. Avoid contact with skin, eyes and clothing.

Storage	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Store locked up. Store away from incompatible materials such as oxidizing agents. Air-sensitive
Specific end use(s)	No further relevant information available.

8. Exposure controls and personal protection

Control parameters	Components with workplace control parameters
Exposure controls	Install a closed system or local exhaust. Also install safety shower and eye bath.
Personal Protection	Eye protection : Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). 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. Full contact Material: butyl-rubber Minimum layer thickness: 0,3 mm Break through time: 480 min Body Protection : Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection : Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.
Gloves	Suit

9. Physical and chemical properties

Physical State	Liquid
Colour	Almost Clear
Odour	No Data Available
Odor threshold	Not Available
pH	No Data Available
Boiling Point	169°C
Initial Boiling Point	Not Available
Freezing Point/ Melting Point	Not Available
Flash Point	53°C
Burning Time	Not Applicable
Burning Rate	Not Applicable
Evaporation rate	Not Applicble
Flammability (solid, gas)	No data available
Upper explosion limit	No data available
Lower explosion limit	0.70%
Explosive properties	10.8%
Vapor pressure	No data available
Vapor density	No data available
Relative Density	0.790

Water solubility	No data available
Partition coefficient: octanol	No data available
Autoignition temperature	295°C
Thermal decomposition	No data available
Viscosity, kinematic	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Dynamic viscosity	No data available
VOC (%)	No data available
Pour point	No information available

10. Stability and reactivity

Recativity	No data available
Stability	Stable under normal conditions and recommended use.
Possibility of hazardous reactions	No data available
Incompatible materials	No data available
Hazardous Decomposition	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)
Condition to Avoid	Heat , Flame & Spark
Polymerization	Hazardous polymerization does not occur.

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - 450 mg/kg LD50 Oral - Rat - 310 mg/kg Remarks: (External MSDS) LC50 Inhalation - Rat - 4 h - 1,548 mg/l (OECD Test Guideline 403) LD50 Dermal - Rat - 600 mg/kg Remarks: (External MSDS) LD50 Dermal - Rabbit - 474 mg/kg
Irritation/Corrosion	No applicable toxicity data
Sensitization	No applicable toxicity data
Mutagenicity	No applicable toxicity data.
Carcinogenicity	IARC: No component 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 applicable toxicity data
Teratogenicity	No applicable toxicity data
Germ cell mutagenicity	Germ cell mutagenicity Ames test Salmonella typhimurium Result: negative (National Toxicology Program)
Specific target organ toxicity	No Data Available
Aspiration hazard	No Data Available

Additional Information	RTECS: MQ5250000 Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

Toxicity to Fish	LC50 - Leuciscus idus (Golden orfe) - 16 mg/l - 48 h LC50 - Leuciscus idus (Golden orfe) - > 46 - 68 mg/l - 96 h (DIN 38412 part 15) Remarks: (External MSDS)
Toxicity to daphnia and other aquatic	EC50 - Daphnia magna (Water flea) - 2,2 mg/l - 24 h Remarks: (ECOTOX Database) invertebrates EC5 - E.sulcatum - 12 mg/l - 72 h Remarks: (maximum permissible toxic concentration)(Lit.)
Toxicity to bacteria	EC5 - Pseudomonas putida - 67 mg/l - 16 h Remarks: (maximum permissible toxic concentration) (External MSDS)
Persistence and degradability	Biodegradability Result: > 60 % - Readily eliminated from water (OECD Test Guideline 302B) Result: 70 - 80 % - Readily biodegradable. (ISO 14593)
Other adverse effects	Harmful to aquatic life.
Bioaccumulative potential	Bioaccumulation is unlikely.
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.
Mobility in soil	No data available

13. Disposal considerations

Remarks	Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
Waste Disposal	Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

14. Transport information

Transport hazard class(es)

	DOT	TDG Classification	IMDG	IATA
UN Number	UN2276	UN2276	UN2276	UN2276
Proper shipping name	2-ETHYLHEXYLAMINE	2-ETHYLHEXYLAMINE	2-ETHYLHEXYLAMINE	2-ETHYLHEXYLAMINE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)	3 (8)
Packing Group	III	III	III	III
Environmental hazards	NO	NO	NO	NO

Marine pollutant: No

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This safety datasheet 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)
Chemical safety assessment	For this product a chemical safety assessment was not carried out
Full text of H-Statements referred to under sections 3.	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H330 Fatal if inhaled.

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.