Material Safety Data Sheet

Di Isopropyl Amine (RXSOL-19-1137-025)

1. Product and Company Identifaction

Product Name	: DI ISOPROPYL AMINE
Part Number	: RXSOL-19-1137-025

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

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2. Composition / informationon ingredients

Name of Substance	Cas Number	EINECS No
DI ISOPROPYL AMINE	108-18-9	203-558-5

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed.H314 Causes severe skin burns and eye damage.H331 Toxic if inhaled.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
Supplemental Hazard Statements	none
Other hazards	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. Lachrymator., Rapidly absorbed through skin.
Classification according to Regulation (EC) No 1272/2008	Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 3), H331 Skin corrosion (Category 1A), H314 For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First Aid Measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture	Carbon oxides, Nitrogen oxides (NOx) Flash back possible over considerable distance., Container explosion may occur under fire conditions.
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary
Further information	Use water spray to cool unopened containers

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	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
Conditions for safe storage, including any incompatibilities	Store in cool place. 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. Storage class (TRGS 510): Flammable liquids
Specific end use(s)	No other specific uses are stipulated

8. Exposure controls and personal protection

Engineering Control	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal Protection	**Eye/face protection Equipment** : Eye/face 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 EU Directive 89/686/EEC and the standard EN 374 derived from it. **Full contact Material:** Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 480 min If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. **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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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). Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided



9. Physical and chemical properties

Form	liquid, clear
Colour	colourless
Odour	Ammonia odor
Initial boiling point and boiling range	84 °C - lit.
Melting point/freezing point	Melting point/range: 61 °C - lit.
Flash Point	-16.99 °C - closed cup
pH	No Data Available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper explosion limit	Upper explosion limit: 8.5 %(V)
Lower explosion limit	Lower explosion limit: 1.1 %(V)
Explosive properties	No data available
Vapor pressure	50 mmHg at 20 °C
vapor density	3.49 - (Air = 1.0)
Relative density	0.722 g/mL at 25 °C

Water solubility	110 g/l at 25 °C - completely soluble
Solubility in other solvents	No data available
Partition coefficient: octanol	log Pow: 0.4 at 20 °C
Autoignition temperature	295 °C at 1,007 hPa
decomposition temperature	No data available
Viscosity, kinematic	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Relative vapour density	3.49 - (Air = 1.0)

10. Stability and reactivity

Recativity	No data available
Chemical Stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Incompatible materials	Strong acids, Strong bases, Strong oxidizing agents, Plastics
Hazardous Decomposition	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) Other decomposition products - No data available In the event of fire: see section 5
Condition to Avoid	Heat, flames and sparks.

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - male and female - 420 mg/kg(Diisopropylamine) LC50 Inhalation - Rat - male and female - 4 h - 5.35 mg/l(Diisopropylamine) (OECD Test Guideline 403) LD50 Dermal - Rabbit - > 10,000 mg/kg(Diisopropylamine)
Skin corrosion/irritation	Skin - Rabbit(Diisopropylamine) Result: Causes severe burns. - 3 min (OECD Test Guideline 404)
Serious eye damage/eye irritation	Eyes - Rabbit(Diisopropylamine) Result: Risk of serious damage to eyes. - 24 h (OECD Test Guideline 405)
Respiratory or skin sensitisation	Maximisation Test - Guinea pig(Diisopropylamine) Result: Does not cause skin sensitisation. (OECD Test Guideline 406)
Germ cell mutagenicity	Mouse(Diisopropylamine) lymphocyte Result: negative
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 data available(Diisopropylamine)
Specific target organ toxicity - single exposure	No data available(Diisopropylamine)
Specific target organ toxicity - repeated exposure	No data available
Additional Information	Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 50 mg/kg (Diisopropylamine) Repeated dose toxicity - Rat - male and female - No observed adverse effect level - >= 150 mg/kg (Diisopropylamine) RTECS: IM4025000 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Diisopropylamine) Liver - Irregularities - Based on Human Evidence(Diisopropylamine)

12. Ecological information

Toxicity to fish	semi-static test LC50 - Gasterosteus aculeatus - 798 mg/l - 96 h(Diisopropylamine)
Toxicity to daphnia and others	static test LC50 - Daphnia magna (Water flea) - 110 mg/l - 48 h(Diisopropylamine)
Toxicity to algae	static test EC50 - SELENASTRUM - 20 mg/l - 96 h(Diisopropylamine)
Toxicity to bacteria	Respiration inhibition EC50 - activated sludge - > 100 mg/l - 3 h(Diisopropylamine) (OECD Test Guideline 209)
Biodegradability	aerobic - Exposure time 28 d(Diisopropylamine) Result: 11 % - Not readily biodegradable. (OECD Test Guideline 301D)
Bioaccumulative potential	No data available
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	Harmful to aquatic life.

13. Disposal considerations

Waste treatment methods	**Product** Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. And according to local , fedral rule and regulation.
Contaminated packaging	Dispose of as unused product.

14. Transport information

UN Number	ADR/RID: 1158 IMDG: 1158 IATA: 1158
Proper shipping name	ADR/RID: DIISOPROPYLAMINE IMDG: DIISOPROPYLAMINE IATA: Diisopropylamine
Transport hazard class(es)	
ADR/RID	3 (8)
Subsidiary risk IMDG	3 (8)
Subsidiary risk IATA	3 (8)
Packing group	
Packing group	ADR/RID: II IMDG: II IATA: II
Environmental hazards	
Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for use	No data available

15. Regulatory information

RegulationsSafety, health and environmental regulations/legislation specific for the substance or mixture	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
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 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. DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.