

## 1. Product and Company Identification

www.rxmarine.com

Product Name Di-tert-butyl peroxide

Part Number RXSOL-60-3303-025

### 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 27612100 ::AOH :0091 9821214367

Email [mail@rxmarine.com](mailto:mail@rxmarine.com)

Website [www.rxmarine.com](http://www.rxmarine.com)

## 2. Composition / Information on ingredients

www.rxmarine.com

| Chemical Name                | Cas No   | EC No     | Weight       | Formula   |
|------------------------------|----------|-----------|--------------|-----------|
| Sodium hypochlorite solution | 110-05-4 | 203-733-6 | 146,23 g/mol | : C8H18O2 |

## 3. Hazards Identification

www.rxmarine.com

### Statement(s)

|                                      |                                                                                                |
|--------------------------------------|------------------------------------------------------------------------------------------------|
| Signal Word                          | Danger                                                                                         |
| Hazard Statements                    | No Data available                                                                              |
| H225                                 | Highly flammable liquid and vapor                                                              |
| H242                                 | Heating may cause a fire                                                                       |
| H341                                 | Suspected of causing genetic defects..                                                         |
| H412                                 | Harmful to aquatic life with long lasting effects.                                             |
| Precautionary statement(s)           |                                                                                                |
| P210                                 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P220                                 | Keep/Store away from clothing/ combustible materials.                                          |
| P273                                 | Avoid release to the environment                                                               |
| P280                                 | Wear protective gloves/ protective clothing/ eye protection/ face protection.                  |
| P410                                 | Protect from sunlight                                                                          |
| P411 + P235                          | Store at temperatures not exceeding 30°C/ 86 °F. Keep cool.                                    |
| Supplemental Hazard information (EU) | None                                                                                           |

## 4. First Aid Measures

www.rxmarine.com

|                                                                            |                                                                                                                                                            |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice                                                             | Show this material safety data sheet to the doctor in attendance.                                                                                          |
| If inhaled                                                                 | After inhalation: fresh air. Call in physician.                                                                                                            |
| Swallowed                                                                  | After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.                                                          |
| Skin Contact                                                               | In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician..                              |
| Eye contac                                                                 | After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.                                             |
| Ingestion                                                                  | Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately. |
| Most important symptoms and effects, both acute and delaye                 | 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

www.rxmarine.com

|                                                       |                                                                                                                                                                |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flammability                                          | May be combustible at high temperature.                                                                                                                        |
| Suitable extinguishing media                          | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                                                        |
| Unsuitable extinguishing media                        | For this substance/mixture no limitations of extinguishing agents are given.                                                                                   |
| Special hazards arising from the substance or mixture | Hydrogen chloride gas Sodium oxides Not combustible. Ambient fire may liberate hazardous vapours..                                                             |
| Further information                                   | Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. |
| Hazardous combustion products                         | No data available                                                                                                                                              |
| Advice for firefighters                               | Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.  |
| Protective Equipment                                  | No data available                                                                                                                                              |
| Specific Hazards Arising from the Chemical            | No data available                                                                                                                                              |

## 6. Accidental Release Measures

www.rxmarine.com

|                                                                     |                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures | Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8. |
| Personal Protection                                                 | Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8.                                                                            |
| Enviromental Precaution                                             | Do not let product enter drains. Risk of explosion                                                                                                                                                                                                                                        |
| 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 carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.                                                        |
| Reference to other sections                                         | For disposal see section 13.                                                                                                                                                                                                                                                              |

## 7. Handling and Storage

www.rxmarine.com

|                         |                                  |
|-------------------------|----------------------------------|
| Advice on safe handling | For precautions see section 2.2. |
|-------------------------|----------------------------------|

|                                                              |                                                                                                                                                  |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling                                | Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.s.                        |
| Hygiene measures                                             | Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. For precautions see section 2.2.. |
| Advice on safe handling                                      | No data available                                                                                                                                |
| Conditions for safe storage, including any incompatibilities | Storage conditions No metal containers. Tightly closed. Do not store near acids. Storage stability Recommended storage temperature               |
| Storage conditions                                           | Tightly closed. Separately or together with other organic peroxides only and away from sources of ignition and heat.                             |
| Storage class                                                | Storage class (TRGS 510): 5.2: Organic peroxides and self-reacting hazardous materials                                                           |
| Specific end use(s)                                          | Apart from the uses mentioned in section 1.2 no other specific uses are stipulated                                                               |
| Advice on general occupational hygiene                       | No data available                                                                                                                                |

## 8. Exposure controls and personal protection

www.rxmarine.com

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exposure controls                 | Ingredients with workplace control parameters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Engineering Control               | Personal protective equipmen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Eye/face 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                                                                                                                                                                                                                                                                                                                                                           |
| Body Protection                   | protective clothing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Skin protection                   | 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                                                                                                                                                                                                                                                                            |
| Respiratory protection            | required when vapours/aerosols 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 ABEK The entrepreneur 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. |
| Other Protection Measure          | Handle in accordance with good industrial hygiene and safety practice.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Control of environmental exposure | Do not let product enter drains.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## 9. Physical and chemical properties

www.rxmarine.com

|                                              |                                                         |
|----------------------------------------------|---------------------------------------------------------|
| Physical state                               | clear, liquid                                           |
| Colour                                       | colorless                                               |
| Odour                                        | very faint                                              |
| Odor Threshold                               | Not Applicable                                          |
| pH                                           | 5,5 - 6,5 at 50 g/l at 20 °C                            |
| Melting Point                                | Melting point/range: < -29 °C - OECD Test Guideline 102 |
| Boiling Point                                | 109 - 110 °C - lit.                                     |
| Flash Point                                  | Upper explosion limit: > 99 %(V)                        |
| Evaporation Rate                             | Not Applicable                                          |
| Flammability (solid, gas)                    | No data available                                       |
| Explosive limits                             | No Data Available                                       |
| Upper/lower flammability or explosive limits | No data available                                       |
| Autoignition temperature                     | No data available                                       |
| Decomposition temperature                    | No data available                                       |

|                          |                                                                               |
|--------------------------|-------------------------------------------------------------------------------|
| Vapour pressure          | 53 hPa at 20 °C                                                               |
| Viscosity                | Viscosity, kinematic: No data available Viscosity, dynamic: No data available |
| Density                  | 0,796 g/mL at 25 °C - lit.                                                    |
| Relative Density         | No data available                                                             |
| Specific Gravity         | No data available                                                             |
| Partition coefficient    | Upper explosion limit: > 99 %(V)                                              |
| Explosive properties     | No data available                                                             |
| Solubility               | No data available                                                             |
| Ignition temperature     | No information available.                                                     |
| Particle characteristics | No data available                                                             |

## 10. Stability and reactivity

www.rxmarine.com

|                                    |                                                                                         |
|------------------------------------|-----------------------------------------------------------------------------------------|
| Reactivity                         | Vapors may form explosive mixture with air.                                             |
| Chemical stability                 | The product is chemically stable under standard ambient conditions (room temperature) . |
| Possibility of hazardous reactions | Risk of explosion with: Amines                                                          |
| Conditions to avoid                | Warming.                                                                                |
| Incompatible materials             | No data available                                                                       |
| Hazardous decomposition products   | In the event of fire: see section 5                                                     |

## 11. Toxicological information

www.rxmarine.com

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute toxicity                                   | LD50 Oral - Rat - > 2.000 mg/kg (OECD Test Guideline 423) LC50 Inhalation - Rat - male and female - 4 h - > 22 mg/l - vapor (OECD Test Guideline 436) LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Skin corrosion/irritation                        | Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Serious eye damage/irritation                    | Remarks: No data available Remarks: Mixture causes serious eye damage. Risk of blindness!                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Respiratory or skin sensitization                | Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Carcinogenicity                                  | Buehler Test - Guinea pig Result: Does not cause skin sensitization. (OECD Test Guideline 406)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Germ cell mutagenicity                           | Suspected of causing genetic defects. In vitro tests showed mutagenic effects Test Type: Ames test Test system: TA1535                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Reproductive toxicity                            | No data available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Specific target organ toxicity - single exposure | 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. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. The following applies to ammonium salts in general: after swallowing: local irritation symptoms, nausea, vomiting, diarrhoea. Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis, haemolysis. Handle in accordance with good industrial hygiene and safety practice. |

## 12. Ecological information

www.rxmarine.com

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Persistence and degradability | The methods for determining biodegradability are not applicable to |
|-------------------------------|--------------------------------------------------------------------|

|                                                     |                                                                                                                                                                                                                                                             |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Toxicity to fish                                    | inorganic substances<br>LC50 - Oncorhynchus mykiss (rainbow trout) - 0,107 mg/l - 96 h<br>Remarks: (ECHA)                                                                                                                                                   |
| Toxicity to daphnia and other aquatic invertebrates | No data available                                                                                                                                                                                                                                           |
| Toxicity                                            | No data available                                                                                                                                                                                                                                           |
| Toxicity to bacteria                                | No data available                                                                                                                                                                                                                                           |
| Toxicity to algae                                   | No data available                                                                                                                                                                                                                                           |
| Products Biodegradation                             | 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.                                                          |
| Endocrine disrupting properties                     | 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. |
| Other adverse effects                               | No data available                                                                                                                                                                                                                                           |

### 13. Disposal considerations

[www.rxmarine.com](http://www.rxmarine.com)

|                         |                   |
|-------------------------|-------------------|
| Waste treatment methods | No data available |
|-------------------------|-------------------|

### 14. Transport information

[www.rxmarine.com](http://www.rxmarine.com)

|                              |                                                                                                                                         |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| UN number                    | ADR/RID:3107 IMDG:3107 IATA:3107                                                                                                        |
| UN proper shipping name      | ADR/RID: ORGANIC PEROXIDE TYPE E, LIQUID (DI-tert-BUTYL PEROXIDE)<br><br>IMDG: ORGANIC PEROXIDE TYPE E, LIQUID (DI-tert-BUTYL PEROXIDE) |
| Transport hazard class(es)   | IATA: Organic peroxide type E, liquid (Di-tert-Butyl peroxide)                                                                          |
| Packaging group              | ADR/RID: 5.2 IMDG: 5.2 IATA:5.2                                                                                                         |
| Environmental hazards        | ADR/RID: : IMDG:: IATA::                                                                                                                |
| Special precautions for user | ADR/RID:No IMDG: No Marine pollutant: No IATA: No                                                                                       |
| Further information          | unnel restriction code : (E)<br>:No data available                                                                                      |

### 15. Regulatory information

[www.rxmarine.com](http://www.rxmarine.com)

|                                                                                                |                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.                                                                                                                      |
| 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. : SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES |
| Other 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                                                                                                                                                     |

### 16. Other information

[www.rxmarine.com](http://www.rxmarine.com)

|                   |                                                                                                                                     |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 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 we 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.

solid