

1. Product and Company Identification

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Product Name : **RXSOL-15-1500**
Product Type : **BLEACHING LIQUID**

Material Identity

Product Name: Chlorine Liquid

General or Generic ID: SALTS

Company Details:

RX MARINE INTERNATIONAL
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Website : www.rxmarine.com

2. Composition / Information on ingredients

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| Chemica Name | CAS # | % BY WEIGHT |
|-----------------|-----------|-------------|
| WATER | 7732-18-5 | 84.0- 86.0 |
| Chlorine Liquid | 7681-52-9 | 14.0- 15.0 |

3. Hazards Identification

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| Eye | Can cause permanent eye injury. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure the cornea and cause blindness. |
| Skin | Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage. Additional symptoms of skin contact may include: skin blistering, hair loss, Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use. |
| Swallowing | Swallowing this material may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury. |
| Inhalation | It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing this material may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory tract. |
| Symptoms of Exposure | Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) cough, tight feeling in the chest, difficult breathing, lung edema (fluid buildup in the lung tissue), lung damage, shock, coma, and death. |
| Target Organ Effects | This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. The significance of this effect with respect to human health is uncertain. |
| Developmental Information | There are no data available for assessing risk to the fetus from maternal |

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|---------------------------|---|
| Cancer Information | exposure to this material. Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration. |
| Other Health Effects | When combined with an acid or ammonia, sodium hypochlorite may produce chlorine or chloramine gas, respectively. Inhalation of these gases results in coughing, choking, difficult breathing, and other symptoms of respiratory tract irritation. Fluid may collect in the lung tissue following a severe gas exposure. |
| Primary Route(s) of Entry | Inhalation, Skin contact, Eye contact. |

4. First Aid Measures

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| Eyes | If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention. |
| Skin | Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse and discard contaminated shoes. |
| Swallowing | Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. If possible, do not leave individual unattended. |
| Inhalation | If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen. |
| Note to Physicians | Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), immune system. |

5. Fire-fighting Measures

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| Flash Point | Not applicable |
| Explosive Limit | Not applicable |
| Autoignition Temperature | No data |
| Hazardous Products of Combustion | May form: chlorine |
| Fire and Explosion Hazards | No special fire hazards are known to be associated with this product. |
| Extinguishing Media | Use an extinguishing media appropriate for surrounding fire.. |
| Fire Fighting Instructions | Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS. |
| NFPA Rating | Health - 3, Flammability - 0, Reactivity - 1 |

6. Accidental Release Measures

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| Small Spill | Dilute with water and absorb onto a noncombustible absorbent material. |
| Large Spill | Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Collect and add slowly to large volume of water. Persons not wearing protective equipment should be excluded from area of spill until clean-up is completed. Stop spill at source. Dike to prevent spreading. Pump to salvage tank. |

7. Handling and Storage

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| Handling | Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Emergency eyewash fountains and safety showers should be available in the immediate vicinity of potential exposure |
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8. Exposure controls and personal protection

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| Eye Protection | Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.) |
| Skin Protection | Wear impervious gloves (consult your safety equipment supplier). To prevent skin contact, wear impervious clothing and boots.. |
| Respiratory Protections | If overexposure has been determined or documented, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure. |
| Engineering Controls | Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects). |
| Exposure Guidelines | Component |
| WATER (7732-18-5) | No exposure limits established |
| SODIUM HYPOCHLORITE (7681-52-9) | No exposure limits established |

9. Physical and chemical properties

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| Boiling Point | (for component) 212.0 F (100.0 C) |
| Vapor Pressure | (for component) 17.500 mmHg |
| Specific Vapor Density | No data |
| Specific Gravity | 1.220 - 1.250 @ 68.00 F |
| Liquid Density | 10.400 lbs/gal @ 68.00 F 1.250 kg/l @ 20.00 C |
| Percent Volatiles | 87.5% |
| Evaporation Rate | SLOWER THAN ETHYL ETHER |
| Appearance | No data |
| State | LIQUID |
| Physical Form | HOMOGENEOUS SOLUTION |
| Color | CLEAR TO YELLOW LIQUID |
| Odor | CHLORINATED BLEACH ODOR |
| pH | 13.5 |
| Solubility in Water | SOLUBLE |

10. Stability and reactivity

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| Hazardous Polymerization | Product will not undergo hazardous polymerization. |
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11. Toxicological information

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No data

12. Ecological information

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No data

13. Disposal considerations

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Waste Management Information

Dispose of in accordance with all state and federal regulations.

14. Transport information

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|--------------------------|-------------------------------------|
| DOT Information | - 49 CFR 172.101 |
| DOT Description: | HYPOCHLORITE SOLUTIONS,8,UN1791,III |
| Container/Mode: | 55 GAL DRUM/TRUCK PACKAGE |
| NOS Component: | Not applicable |
| RQ (Reportable Quantity) | - 49 CFR 172.101 |
| Product Quantity (lbs) | Component |

15. Regulatory information

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-----\Chemical Inventory Status - Part 1\-----

| Ingredient | TSCA | EC | Japan | Australia |
|--|------|-----|-------|-----------|
| Sodium Hypochlorite (as NaOCl) (7681-52-9) | Yes | Yes | Yes | Yes |
| Water (7732-18-5) | Yes | Yes | Yes | Yes |

-----\Chemical Inventory Status - Part 2\-----

--Canada--

| Ingredient | Korea | DSL | NDSL | Phil. |
|------------|-------|-----|------|-------|
|------------|-------|-----|------|-------|

| | | | | |
|--|-----|-----|----|-----|
| Sodium Hypochlorite (as NaOCl) (7681-52-9) | Yes | Yes | No | Yes |
| Water (7732-18-5) | Yes | Yes | No | Yes |

-----\Federal, State & International Regulations - Part 1\-----

-SARA 302- -----SARA 313-----

| Ingredient | RQ | TPQ | List | Chemical Catg. |
|--|----|-----|------|----------------|
| Sodium Hypochlorite (as NaOCl) (7681-52-9) | No | No | No | No |
| Water (7732-18-5) | No | No | No | No |

-----\Federal, State & International Regulations - Part 2\-----

-RCRA- -TSCA-

| Ingredient | CERCLA | 261.33 | 8(d) |
|------------|--------|--------|------|
|------------|--------|--------|------|

| | | | |
|--|-----|----|----|
| Sodium Hypochlorite (as NaOCl) (7681-52-9) | 100 | No | No |
| Water (7732-18-5) | No | No | No |

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
Reactivity: No (Mixture / Liquid)

Australian Hazchem Code: None allocated.

Poison Schedule: S5

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR

16. Other information

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The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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.