



| I - PRODUCT IDENTIFICATION AND USE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |              |                                                                                                    | MSDS ID: 0056          |  |
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| <b>PRODUCT NAME:</b> 19% SODIUM HYPOCHLORITE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |              |                                                                                                    |                        |  |
| <b>USE:</b> Liquid Bleach                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |              |                                                                                                    |                        |  |
| <b>SUPPLIER:</b><br>JohnsonDiversey Canada, Inc.<br>2401 Bristol Circle<br>Oakville Ontario, L6H 6P1, Canada                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |              | <b>EMERGENCY PHONE:</b><br><br><b>1-800-668-7171</b>                                               |                        |  |
| <b>WHMIS CLASSIFICATION:</b> D2B E<br><b>CHEMICAL FAMILY:</b> Chlorinated alkali                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |              | <b>TRADE NAME / SYNONYMS:</b> not applicable<br><b>CHEMICAL NAME:</b> Sodium hypochlorite solution |                        |  |
| <b>II - HAZARDOUS INGREDIENTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |              |                                                                                                    |                        |  |
| <b>HAZARDOUS INGREDIENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>% w/w</b> | <b>CAS #</b> | <b>LD50 / LC50</b>                                                                                 | <b>Route / Species</b> |  |
| Sodium hypochlorite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 10-30        | 007681-52-9  | not available                                                                                      | n/a                    |  |
| <b>III - HANDLING AND DISPOSAL PROCEDURES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |              |                                                                                                    |                        |  |
| <b>PERSONAL PROTECTIVE EQUIPMENT:</b><br><b>Gloves:</b> impermeable gloves <b>Eye:</b> safety goggles <b>Footwear:</b> not applicable<br><b>Respiratory:</b> If mists are generated, use NIOSH approved mask <b>Other:</b> impermeable apron                                                                                                                                                                                                                                                                                                                                                      |              |              |                                                                                                    |                        |  |
| <b>SPECIAL HANDLING PROCEDURES AND EQUIPMENT:</b> Avoid eye and skin contact.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |              |                                                                                                    |                        |  |
| <b>VENTILATION REQUIREMENTS:</b> mechanical exhaust                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |              |                                                                                                    |                        |  |
| <b>INCOMPATIBILITY (Material to Avoid):</b> Acids, oxidizable materials, ammonia, urea, other nitrogenous materials, and metals.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |              |                                                                                                    |                        |  |
| <b>SPILL PROCEDURES:</b> Contain the spill. Do not allow the spilled product to go to drain. Neutralize with sodium sulfite, sodium bisulphite, or dilute hydrogen peroxide. Mop up or soak up with absorbent clay for disposal. Wash spill area with large volumes of water.                                                                                                                                                                                                                                                                                                                     |              |              |                                                                                                    |                        |  |
| <b>WASTE DISPOSAL:</b> Dispose according to municipal, provincial and federal regulations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |              |                                                                                                    |                        |  |
| <b>STORAGE / SHIPPING REQUIREMENT:</b> Store in a cool dry area in a closed container. Keep away from oxidizable materials. UN1791                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |              |                                                                                                    |                        |  |
| <b>IV - PHYSICAL PROPERTIES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |              |                                                                                                    |                        |  |
| <b>APPEARANCE / ODOUR:</b> Clear, yellow-green liquid - chlorine odour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |              |                                                                                                    |                        |  |
| <b>S.G. / BULK DENSITY(g/cc):</b> 1.25 ± 0.01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |              | <b>pH:</b> (concentrate): 12.0                                                                     |                        |  |
| <b>VAPOUR PRESSURE (mmHg):</b> 17.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |              | <b>VAPOUR DENSITY (air=1):</b> not applicable                                                      |                        |  |
| <b>ODOUR THRESHOLD:</b> not available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |              | <b>BOILING POINT:</b> approx. 100°C                                                                |                        |  |
| <b>FREEZING POINT:</b> -25°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |              | <b>PERCENT VOLATILE:</b> 85%                                                                       |                        |  |
| <b>SOLUBILITY IN WATER:</b> soluble                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |              | <b>EVAPORATION RATE (water=1):</b> not available                                                   |                        |  |
| <b>V - TOXICOLOGICAL PROPERTIES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |              |                                                                                                    |                        |  |
| <b>EFFECTS OF ACUTE EXPOSURE TO MATERIAL:</b><br><b>EYES:</b> Corrosive. May cause severe irritation. May cause permanent damage if not treated promptly.<br><b>SKIN:</b> Corrosive. May cause severe irritation. May cause temporary or permanent damage if not treated promptly.<br><b>INGESTION:</b> Corrosive. May cause severe irritation of the digestive tract. May cause permanent damage if not treated promptly. May lead to convulsions, coma and death.<br><b>INHALATION:</b> May cause irritation of the nose and throat, coughing, difficulty breathing; may cause pulmonary edema. |              |              |                                                                                                    |                        |  |

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| <b>LD50 (calculated):</b> not available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                | <b>LC50 (calculated):</b> not available                                                                                  |  |
| <b>OTHER TOXIC EFFECTS:</b> none known                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                |                                                                                                                          |  |
| <b>EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:</b> none known                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                |                                                                                                                          |  |
| <b>VI - FIRST AID MEASURES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                |                                                                                                                          |  |
| <b>EYES:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Flush eyes with plenty of water for at least 15 minutes. Hold eye lids open while rinsing. Contact a physician immediately.                    |                                                                                                                          |  |
| <b>SKIN:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Flush affected area thoroughly with water. If irritation persists, contact a physician.                                                        |                                                                                                                          |  |
| <b>INGESTION:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Drink large volumes of water . Never give anything by mouth to an unconscious person. Do not induce vomiting. Contact a physician immediately. |                                                                                                                          |  |
| <b>INHALATION:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Remove patient to fresh air. If breathing difficulty occurs, get medical attention.                                                            |                                                                                                                          |  |
| <b>VII - FIRE AND EXPLOSION DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                |                                                                                                                          |  |
| <b>FLAMMABLE:</b> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                |                                                                                                                          |  |
| <b>FLASH POINT, °C:</b> not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                | <b>AUTO IGNITION TEMPERATURE, °C:</b> N/Ap                                                                               |  |
| <b>EXTINGUISHING MEDIA:</b> Water [X] Dry Chemical [X] Carbon Dioxide [X] Foam [X] Other [ ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                |                                                                                                                          |  |
| <b>SPECIAL FIRE FIGHTING PROCEDURES:</b> Wear self-contained breathing apparatus and full protective equipment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                |                                                                                                                          |  |
| <b>HAZARDOUS COMBUSTION PRODUCTS:</b> chlorine gas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                |                                                                                                                          |  |
| <b>EXPLOSIVE SENSITIVITY TO:</b> not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                |                                                                                                                          |  |
| <b>VIII - REACTIVITY DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                |                                                                                                                          |  |
| <b>STABILITY:</b> Stable [ ] Unstable [X]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                |                                                                                                                          |  |
| <b>CONDITIONS TO AVOID:</b> Decomposes slowly. Do not expose to temperatures above 40°C (104°F), sunlight, or metals.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                |                                                                                                                          |  |
| <b>INCOMPATIBILITY (Material to Avoid) :</b> Acids, oxidizable materials, ammonia, urea, metals.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                |                                                                                                                          |  |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS:</b> Chlorine gas is released by contact with acids; oxygen is released by contact with metals. Contact with ammonia and urea produce nitrogen gas and chloramines. Contact with oxidizable materials produces heat which may generate chlorine gas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                |                                                                                                                          |  |
| <b>REACTIVITY:</b> not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                |                                                                                                                          |  |
| <b>IX - MSDS PREPARATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                |                                                                                                                          |  |
| <b>SOURCES USED:</b> RTECS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                | <b>PREPARED BY:</b> JohnsonDiversey Canada, Inc.<br>Regulatory Department<br>Industrial Division<br>Phone (905) 829-1200 |  |
| <b>PREPARATION DATE:</b> April 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                |                                                                                                                          |  |
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