

MATERIAL SAFETY DATA SHEET

| | | | | | |
|--|---------------|---|---------------|--------------------|--------------|
| Product Name: Sodium Hypochlorite 10-15% | | | | | |
| 1. Chemical product and company identification | | | | | |
| Product name | | Sodium Hypochlorite | | | |
| Company identification Address and telephone number | | Total Pool Chemicals Ltd Unit 1, Pool Bank Park High Street, Tarvin, Chester CH3 8JH | | | |
| Emergency telephone number | | 01829 740290 | | | |
| 2. Composition/Information on ingredients | | | | | |
| Chemical Name | CAS No | Conc(%) | Symbol | R-phrase(s) | EC No |
| Sodium Hypochlorite | 7681-52-9 | 10-15% | C | C; R34 | 231-668-3 |
| Cl Active | | | | R31;R50 | |
| Sodium Hydroxide | 1310-73-2 | 0-5% | C | R35 | 215-185-5 |
| 3. Hazards identification | | | | | |
| | | Contact with acids liberates toxic gas. Causes burns. | | | |
| 4. First-aid measures | | | | | |
| Inhalation: | | Remove from exposure. Keep warm and at rest. If there is difficulty in breathing, give oxygen. Do not use mouth to mouth ventilation. Obtain medical attention urgently. | | | |
| Skin contact: | | Immediately flood the skin with large quantities of water, preferably under a shower. Remove contaminated clothing as washing proceeds. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists. | | | |
| Eye contact: | | Immediately flood the eye with plenty of water for at least 10 minutes, holding the eye open. Obtain medical attention urgently. | | | |
| Ingestion: | | Wash out mouth with water. Have victim drink 240-300ml of water to dilute stomach contents. Obtain medical attention. Do not induce vomiting. | | | |

Material Safety Data Sheet: Sodium Hypochlorite 10-15%

| | |
|---|---|
| <p>5. Fire-fighting measures</p> <p>Suitable Extinguishers</p> <p>Unusual fire/explosion hazards</p> <p>Hazardous Combustion Products</p> <p>Hazardous Thermal (de)composition products</p> <p>Special Equipment for Fire Fighting</p> | <p>Use extinguisher suitable to cause of fire. Use water spray. Keep containers and surroundings cool with water spray.</p> <p>This product may give rise to hazardous fumes in a fire. Can be violent and explosively reactive when in contact with ammonia and oxidising agents-see stability and reactivity.</p> <p>Chlorine Oxygen</p> <p>Reacts with acids generating: Chlorine Gas</p> <p>Wear full protective clothing and self contained breathing apparatus</p> |
| <p>6. Accidental release measure</p> <p>Personal precautions:</p> <p>Environmental Precautions & Methods for cleaning up:</p> | <p>Ventilate the area. Wear appropriate protection, protective gloves, goggles, overalls and boots. Wear respiratory protection.</p> <p>Small spillages may be flushed with large quantities of water. Large spillages should be collected for disposal. Contain and absorb using earth, sand or other inert material. Advise authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.</p> |
| <p>7. Handling and Storage</p> <p>Ventilation</p> <p>Handling</p> <p>Storage</p> <p>Recommended Use</p> | <p>Use in a well ventilated area</p> <p>Emergency shower and eye wash facilities should be readily available. Avoid contact with eyes, skin and clothing. Avoid inhaling vapour.</p> <p>Storage Area: Cool, dry, well ventilated and out of direct sunlight. Storage Tanks: Completely enclosed apart from vent and overflow connections. Store in externally reinforced PVC, high density polyethylene or carbon steel lined with suitable grade of rubber. Suitable storage materials are plastic lined steel. Do not store in metal drums.</p> <p>Use original container</p> |
| <p>8. Exposure controls/Personal Protection</p> | |

Material Safety Data Sheet: Sodium Hypochlorite 10-15%

| | |
|----------------------------|---|
| Exposure Limits: | Not available |
| Hygiene Measures | Wash hands after handling compounds and before eating, smoking and using the lavatory and at the end of the day. |
| Engineering Measures | Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Ensure that eyewash stations and safety showers are close to the workstation location. |
| <u>Protective Measures</u> | |
| Respiratory protection: | If there is a risk of exposure to high vapour concentrations. |
| Hand protection: | PVC or rubber gloves |
| Eye protection: | Goggles |
| Skin and body protection: | Wear hood and visor, rubber boots. If there is danger of splashing, wear: PVC or other impermeable suit. |

9. Physical & Chemical Properties

| | |
|---------------------|--------------------------|
| Appearance | Liquid |
| Colour | Yellow-Green |
| Odour | Characteristic. Bleach. |
| Boiling Point | 107 apx |
| Melting Point/range | -25 approx |
| Density | Not available |
| Vapour Density | Heavier than air |
| Solubility | Completely soluble |
| pH | >pH 12 |
| Flash Point | Not available |
| Viscosity | 3.45 cP AT 20°C (15%sol) |

Material Safety Data Sheet: Sodium Hypochlorite 10-15%

| | |
|--|---|
| Stability and Reactivity | |
| Stability | Sodium hypochlorite solutions decompose slowly on standing, with the production of sodium chloride and sodium chlorate and the Evolution of oxygen. This process is accelerated by heat and exposure to light as well as contamination by certain metals. |
| Conditions to avoid: | Exposure to light. High Temperatures. Temperatures less than -5°C. |
| Materials to avoid | Organic materials. Acids. Amines. Peroxides. Alcohols. Aldehydes. Unsaturated Oils. Oxidising Agents. Ammonia. Ammonium salts. Iron. Copper. Nickel. Brass. Steel. |
| Hazardous decomposition products | Reacts with acids generating: chlorine gas |
| 11. Toxicological Information | |
| Skin Irritation | Hazardous in case of skin contact (corrosive) |
| Eye Irritation | Hazardous in case of eye contact (irritant) |
| Acute Toxicity | Oral LD50 (rat) 5000mg/kg. (12.5%) |
| Chronic Toxicity | Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation, leading to frequent attacks of bronchial infection. |
| 12. Ecological Information | |
| Ecotoxicity | This product is rated as slightly toxic to aquatic species. Tests on the following species gave a 24h CHLORINE LC100 of 1mg/litre: fish. Incidents of damage to crops are few and have been associated with accidental releases. |
| 13. Disposal Considerations | |
| Methods of disposal; Waste of residues; Contaminated packaging | Dispose of in accordance with all applicable local and national regulations. |
| Waste Classification | Not applicable |
| 14. Transport Information | |
| UN Number | 1791 |
| Proper Shipping Name | Hypochlorite Solution |
| Class | 8 |
| Packing Group | III |
| Label | Corrosive |
| ADR/RID Class | 8 |
| ADR/RID Hazard Identification Number | 80 |
| IMDG Packing Group | III |
| IMDG Class | 8 |

Material Safety Data Sheet: Sodium Hypochlorite 10-15%

| | |
|---|---|
| IATA Packing Group | III |
| IATA Class | 8 |
| 15. Regulatory Information | |
| Hazard Symbols | Corrosive |
| Classification | Corrosive |
| Risk Phrases: | R31 Contact with acids liberates toxic gas R34 Causes burns. |
| Safety Phrases: | S1/2 Keep locked up and out of reach of children S28 After contact with skin, wash immediately with plenty of water S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible) S50 Do not mix with acids |
| EC No | |
| Contains | SODIUM HYPOCHLORITE 10%-15% |
| Product Use | Classification and labelling have been performed according to EU directives 67/548/EEC. 88/379/EEC, including amendments and the intended use. –consumer applications |
| 16. Other Information | |
| Produced 15.01.08 | |
| The statements made herein are based on our best present experience and are intended to describe product safety requirements. They should not therefore be considered as a warranty of specific properties. | |