68020100

QUEEN BLEACH LIMITED CO.

Material Safety Data Sheet

Sodium Hypochlorite 5.25%

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: 10001
Product Name: Sodium Hypochlorite 5.25%
Synonyms: None
Chemical Family: Hydrochlorous acid, sodium salt.
Application: Not Available.
Distributed By:
Queen Bleach Co. Limited
7419 Bren Rd.
Mississauga, Ont. L4T-1H3
24-Hour Emergency Telephone Number Canutec: (613) 996-6666
Prepared by: Queen Bleach Co. Limited
Preparation date: Jan 2, 2007.

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

Ingredients	Percentage	LD50s and LC50s Route & Species:
Sodium Hypochlorite, Solution	3-7	Oral LD50 (Mouse) 5800 mg/kg

NON-HAZARDOUS COMPONENTS

Ingredients	Percentage	LD50s and LC50s Route & Species:
Water	Balance	Not available.

Notes: No additional remark.

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:
Eye Contact: Corrosive to eye tissue and may cause severe damage and blindness. This product causes corneal sarring and clouding. Glaucoma. Cataracts.
Skin Contact: Corrosive. Causes severe burns. Prolonged and repeated exposure to dilute solutions often causes irritation, redness, pain and drying and cracking of the skin. Toxic effects may be delayed. Avoid handling when the skin is moist, wet or abraided. May cause dermatitis, prolonged or repeated contact may cause skin sensitization.

Inhalation: Corrosive to respiratory passages. Causes irritation of the mouth, nose and throat. Repeated and/or prolonged exposures may cause productive cough, running nose, bronchopneumonia, pulmonary edema (fluid buildup

in lungs) and reduction of pulmonary function. If mixed with acids or warmed to temperatures greater than 40 degrees Celcius, Sodium hypochlorite solutions release chlorine gas. This gas can cause severe irritation of the nose and throat. Exposures to high levels of chlorine gas may result in severe lung damage.
Ingestion: Corrosive. Causes burns to the mouth, throat and stomach. Causes vomiting, nausea, and diarrhea. Coma, shock and death may occur.

4. FIRST AID MEASURES

Eye Contact: Wash eyes with water for a minimum of 30 minutes or until no evidence of the chemical remains. Hold eyelids open during flushing. Seek immediate medical attention.
Skin Contact: Remove contaminated clothing. Wash skin with water for at least 30 minutes, using soap if available. Obtain medical attention immediately.
Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Ingestion: Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Seek immediate medical attention.
Notes To Physician: Due to the severely irritating or corrosive nature of the material, swallowing may lead to ulceration and inflammation of the upper alimentary tract with hemorrhage and fluid loss. Also, perforation of the esophagus or stomach may occur, leading to mediastinitis or peritonitis and the resultant complications.

5. FIRE FIGHTING MEASURES

Flash Point: None - will not burn.
Flash Point Method: Not applicable.
Autoignition Temperature: Not applicable.
Flammable Limits in Air (%): Not applicable.
Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Special Exposure Hazards: Keep containers cool to prevent rupture and release of material. Closed containers may explode in fire. Spilled material may cause floors and contact surfaces to become slippery.
Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing equipment.
NFPA RATINGS FOR THIS PRODUCT ARE: Not Available.
HMIS RATINGS FOR THIS PRODUCT ARE: Not Available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Wear appropriate protective equipment.
Environmental Precautionary Measures: Prevent from entering sewers, waterways or low areas. Prevent contamination of soil. Consult local authorities.
Procedure for Clean Up: Absorb with an inert dry material and place in an appropriate waste disposal container. Spilled material may cause floors and contact surfaces to become slippery. Dike and contain land spills; contain water spills by booming. Ventilate area.

7. HANDLING AND STORAGE

Handling: Use good personal hygiene. Use appropriate personal protective equipment. Use with adequate ventilation. Containers which have been exposed to heat may be under internal pressure. These should be cooled and carefully vented before opening. When diluting, add this product to water in small amounts to avoid spattering. Never add water to this material.
Storage: Equipment for storage, handling or transporation should not be made of: tin, copper and its alloys, nickel and its alloys and iron. Some metals accelerate the decomposition of Sodium Hypochlorite. Store below 29 Degrees Celsius. Do not freeze. Store in a cool, dry, well ventilated area, away from heat and ignition sources. Store away from organic chemicals, strong bases,

metal powders, carbides, sulfides, and any readily oxidizable material. Keep away from direct sunlight. Storage area should be equipped with corrosion-resistant floors, sumps and should have controlled drainage to a recovery tank.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Make up air should always be supplied to balance air exhausted (either generally or locally). For personnel entry into confined spaces (i.e. bulk storage tanks) a proper confined space entry procedure must be followed including ventilation and testing of tank atmosphere. Ventilation should be corrosive proof.
Respiratory Protection: Wear a Niosh approved full facepiece respirator for acid gases or a self-contained breathing apparatus for air concentration levels up to 5 ppm. NIOSH approved supplied air respirator when airborne concentrations exceed exposure limits.
Gloves: Impervious gloves. Neoprene gloves. Nitrile gloves. Rubber gloves.
Skin Protection: Neoprene coated apron or chemical resistant clothing. Impervious boots.
Eyes: Chemical safety goggles and/or full face shield to protect eyes and face, if product is handled such that it could be splashed into eyes. Do NOT wear contact lenses.
Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

Ingredients	Percentage	Exposure Limit - ACGIH	Exposure Limit - OSHA
Sodium Hypochlorite, Solution	3-7	0.5 ppm As For Chlorine	. Not available.
Water	Balance	Not available.	Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Green to yellow.
Odor: Typical chlorine bleach.
pH 11.5 - 13
Specific Gravity: 1.076
Boiling Point (°C): 101
Freezing/Melting Point (°C): -4
Vapor Pressure (mm Hg): 22 @ 20 °C
Vapor Density: Not Available.
% Volatile by Volume: 91
Evaporation Rate: Not Available.
Solubility: Soluble.
VOCs (lbs/gallon): None
Viscosity: Water type
Molecular Weight: Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Unstable.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Avoid excessive heat, open flames and all ignition sources.
Materials to Avoid: Strong oxidizers. Reducing agents. Ammonia
Hazardous Decomposition Products: When heated to decomposition, it emits acrid smoke and irritating fumes. Chlorine. Oxides of sodium. Oxygen. Sodium Hypochlorite solutions decompose slowly. Decomposition is accelerated by heat (temperatures above 40 degrees Celcius) and light.
Additional Information: Hypochlorites may react with primary amines to form nitrogen trichloride which explodes spontaneously in air. Hypochlorite bleach reacts with urea to form nitrogen trichloride whic explodes spontaneously in air. Some metals accelerate the decomposition of Sodium Hypochlorite. Nickel. Copper. Tin. Iron and its alloys. Manganese.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure

Ingestion: Corrosive. Causes burns to the mouth, throat and stomach. Causes vomiting, nausea, and diarrhea. Coma, shock and death may occur.

Skin Contact: Corrosive. Causes severe burns. Prolonged and repeated exposure to dilute solutions often causes irritation, redness, pain and drying and cracking of the skin. Toxic effects may be delayed. Avoid handling when the skin is moist, wet or abraided. May cause dermatitis, prolonged or repeated contact may cause skin sensitization.

Inhalation: Corrosive to respiratory passages. Causes irritation of the mouth, nose and throat. Repeated and/or prolonged exposures may cause productive cough, running nose, bronchopneumonia, pulmonary edema (fluid buildup in lungs) and reduction of pulmonary function. If mixed with acids or warmed to temperatures greater than 40 degrees Celcius, Sodium hypochlorite solutions release chlorine gas. This gas can cause severe irritation of the nose and throat. Exposures to high levels of chlorine gas may result in severe lung damage.

Eye Contact: Corrosive to eye tissue and may cause severe damage and blindness. This product causes corneal scarring and clouding. Glaucoma. Cataracts.

Additional Information:

Sodium hydrochlorite may cause skin sensitization or other allergic responses. Aspiration may cause lung damage. Corrosive effects on the skin and eyes may be delayed, and damage may occur without the sensation or onset of pain.

Acute Test of Product:

Acute Oral LD50: Not Available.

Acute Dermal LD50: Not Available.

Acute Inhalation LC50: Not Available.

Carcinogenicity:

Ingredients	IARC –Carcinogens	ACGIH -Carcinogens
Sodium Hypochlorite, Solution	Not listed.	Not listed.
Water	Not listed.	Not listed.

Carcinogenicity Comment: No additional information available

Genotoxicity: Not Available.

Reproductive/Developmental Toxicity: Not Available.

Teratogenicity: Not Available.

Embryotoxicity: Not Available.

Mutagenicity: Not Available.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ingredients	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity – Freshwater Algae Data
Sodium Hypochlorite, Solution	Not Available.	Not Available.	Not Available. Not Available.
Water	Not Available.	Not Available.	Not Available.

Other Information: Harmful to aquatic life at low concentrations. Toxicity is primarily associated with pH.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal
regulations.
Contaminated Packaging: Empty containers retain product residue (liquid and/or vapour) and can be dangerous. Do
not expose such containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode. Do
not dispose of package until throughly washed out. Dispose of container according to national or local regulations.

14. TRANSPORT INFORMATION

DOT (U.S.):
DOT Shipping Name: CORROSIVE LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
DOT Hazardous Class 8
DOT UN Number: UN1760
DOT Packing Group: III
DOT Reportable Quantity (lbs): Not Applicable.
Marine Pollutant: No.
ICAO/IATA:
IATA Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
IATA Hazard Class: 8
UN/NA Number: UN1760
Packing Group: III
IATA Label: Corrosive.
Remarks: No additional remark.
IMDG:
IMDG Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
Hazard Class: 8
Packing Group: III
Marine Pollutant: No.
IMDG Label: Corrosive.
Remarks: No additional remark.
TDG (Canada):
TDG Proper Shipping Name: CORROSIVE LIQUID N.O.S (sodium hypochlorite)
Hazard Class: 8
UN Number: UN1760
Packing Group: III
Note: No additional remark.
Marine Pollutant: No.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on theToxic Substances Control Act (TSCA)
Inventory List or exempt.
Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL) or
the Non-Domestic Substances List (NDSL) or exempt.

U.S. Regulatory Rules

Ingredients	CERCLA/SARA – Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Sodium Hypochlorite, Solution	Not Listed.	LISTED	Not Listed.
Water	Not Listed.	Not Listed.	Not Listed.

California Proposition 65: Not Listed.
MA Right to Know List: Listed.
New Jersey Right-to-Know List: Listed.
Pennsylvania Right to Know List: Listed.
WHMIS Hazardous Class:
D2B TOXIC MATERIALS
E CORROSIVE MATERIAL

16. OTHER INFORMATION

Additional Information: This product has been classified in accordance with the hazard criteria of the
Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
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*****END OF MSDS*****