Safety Data Sheet

SODIUM HYPOCHLORITE 12.5%

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Sodium Hypochlorite 12.5%
Other Name	Hypochlorite Solution
Product Code	
Product Use	Dairy, food and beverage industries: Sanitising processing equipment.
Company Name	Sure Kleen Products Pty. Ltd.
Address	9 Agett Road Malaga WA 6090
Emergency	National Poison Information Centre: 13 11 26
Telephone	(08) 92487444
After Hours	1800 057 377
Web	www.surekleenproducts.com.au

2. HAZARDS IDENTIFICATION

Hazardous Nature:
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.
This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.
Poisons Schedule (SUSMP): S6 Poison.

Classification of the substance or mixture:
Skin Corrosion/Irritation - Category 1B
Serious Eye Damage/Irritation - Category 1
Acute Hazard To The Aquatic Environment - Category 1


Signal Word: Danger

Hazard Statement(s):
EUH031 Contact with acids liberates toxic gas.
H302 Harmful if swallowed
H400 Very toxic to aquatic life.

Precautionary Statement(s):
Prevention:
P260 Do not breathe dust / fume / gas / mist / vapours / spray.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

Response:
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 Wash contaminated clothing before re-use.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391 Collect spillage.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

	Ingredient	CAS	Proportion
	Water	7732-18-5	To 100%
	Sodium hypochlorite	7681-52-9	12.5%
	Sodium Hydroxide	1310-73-2	<1%

4. FIRST AID MEASURES

Inhalation	If inhaled, remove to fresh air. Seek medical attention immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. DO NOT use mouth to mouth respiration
Ingestion	If swallowed, do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of water. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.
Skin	Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner, which limits further exposure.
Eye	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Seek immediate medical attention.
Advice to Doctor	Symptoms caused by exposure: Chlorine gas released from sodium hypochlorite causes irritation of respiratory system, with coughing, difficult breathing, stomatitis, nausea and pulmonary edema. Contact with skin can cause skin irritation, followed by blisters and eczema (especially at 12% conc). Eye contact causes serious damages of eyes. Ingestion of tens of grams of sodium hypochlorite solution (12% concentration) can cause mucous membrane burns, perforation of the esophagus and stomach, and laryngeal oedema. Medical Attention and Special Treatment: In case of eyes and face splashing, treat eyes firstly. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Water fog (or if unavailable fine water spray), foam, dry chemical powder and carbon dioxide.
Hazards from Combustion	Non-flammable. May evolve chlorine if heated to decomposition. Contact with combustible materials can cause explosions. Hazchem Code: 2X
Precautions for Fire Fighters	When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Wear approved respiratory protection and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.
Spills & Disposals	Small spills may be safely mopped up. When handling large spills, wear eye protection, gloves and safety boots. Contain spilled material using sand or earth. Prevent run-off into drains and waterways. The spills can be neutralized using light reducing agents such as sodium sulphite, sodium bisulphite or sodium thiosulphate. Do not use sulphates or bi-sulphate! Transfer spilled material to suitable containers for re-use or disposal. Transfer contaminated sand or earth to suitable containers for disposal. Clearly label all containers. After cleaning up, wash contaminated area with water.

7. HANDLING AND STORAGE

Storage	Store in a cool, dry and well ventilated area. Keep in original container tightly closed when not in use. Isolate from incompatible substances. The aqueous solutions are sensitive to light and air. Protect against physical damage. Check regularly for spills.
Handling	Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapour/mist. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

8. EXPOSURE CONTROL/PERSONAL PROTECTION	
Exposure Standards	Chlorine Peak limitation: 3 mg/m³
Biological Limits	None allocated.
Engineering controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.
Personal Protective Equipment	Respiratory Protection: Use an approved air purifying or air-fed respirator if high airborne concentrations of the material are present and minimising exposure by ventilation is not possible. See Australian Standards AS/NZS 1715 and 1716 for more information. Skin Protection: PVC, neoprene or rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information. Eye and Face Protection: Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.
9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Clear liquid
Odour	Chlorine
pH (neat)	>12
Vapour Pressure	2500 Pa (@20^{0}C
Vapour Density	No data available
Boiling Point/Range	100^{o}C
Freezing/Melting point	No data available
Solubility in Water	Miscible in all proportions
Specific Gravity	1.09
Flash Point	Not applicable
Flammable Limits	Not flammable
10. STABILITY AND REACTIVITY	
Chemical Stability	Unstable. Stability decreases with concentration, heat, light exposure, decrease in pH and contamination with heavy metals, such as nickel, cobalt, copper and iron. At pH<11, sodium hypochlorite is unstable and decomposes with the release of chlorine.
Hazardous Reactions	Emits toxic fumes of chlorine (hypochlorous acid and sodium chlorate) when heated to decomposition. The decomposition is an exothermal process.
Conditions to Avoid	Light, heat and incompatibles.
Incompatible Materials	Incompatible materials and possible hazardous reactions: aluminum, brass, cellulose, steel, stainless steel, bronzes. Strong acids, strong oxidizers, heavy metals (which act as catalysts), reducing agents, ammonia and ammonium salts, ether, and many organic and inorganic chemicals such as paint, kerosene, paint thinners, shellac.
11. TOXICOLOGICAL INFORMATION	
Health Hazard Summary	No adverse health effects are expected if the product is handled in accordance with the label and this safety data sheet.
Inhalation	Irritant. Inhalation of sprayed solution and vapours can cause respiratory system irritation caught, difficulty of breathing, stomatitis, nausea and pulmonary edema. Classified as STOT Single Exposure 3.
Ingestion	Causes severe pain, nausea, vomiting, diarrhoea, and shock. May cause haemorrhaging of the digestive tract. May cause corrosion and permanent tissue destruction of the oesophagus and digestive tract. May be harmful if swallowed.
Skin	Light irritant at low concentrations. Moderate irritant at medium concentrations (>5%). Corrosive at concentration higher than 10%. Skin corrosive category 1B.
Eye	Causes eye damage. Eye damage, category 1. Eye contact causes serious burns and discomfort.
Toxicity Data	Sodium hypochlorite Oral LD_{50} 1100 mg/kg (rat)

Other	Prolonged inhalation may cause respiratory tract inflammation and lung damage. Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis to serious eye damage.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways
Persistence and Degradability	This material is biodegradable.
Mobility	Hypochlorite remains in aqueous phase and degrades to chlorine.
Aquatic toxicity	Very toxic to aquatic organisms 48hr LC_{50} (fish): 0.07 - 5.9 mg/L.

13. DISPOSAL CONSIDERATIONS

Waste Disposal	Consult your state Land Waste Management Authority for more information.
Legislation	Dispose of in accordance with applicable local and national regulations.

14. TRANSPORT INFORMATION

Classified as a Dangerous Good according to the criteria of the ADG Code	
U.N. Number	1791
Proper Shipping Name	Hypochlorite solution
Class and Subsidiary Risk(s)	Class 8 Corrosive
EPG	37 Toxic And /Or Corrosive Substances Non-Combustible
Packing Group	II
Special Precautions	None allocated
Hazchem Code	2X

15. REGULATORY INFORMATION

Poisons Schedule	S6
AICS	All ingredients are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Contact Point	John Browner
Title	Technical Manager
Telephone	08 92487444
After Hours	1800 057 377

The information contained in this Safety Data Sheet is believed to be accurate and reliable; however, Sure Kleen Products shall not be liable for any inaccuracy in the information or for any loss, injury or damage whatsoever arising from the use of this product as conditions and methods of use are beyond our control. Users should read this Safety Data Sheet and evaluate the information in the context of how the user intends to handle and use the product in the workplace including the use of this product with other products.

End of Report