SECTION 1: Product and Company Identification

Name	SODIUM HYPOCHLORITE SOLUTION	
Company	MADAN CHEMICALS PVT.LTD10&11, Industrial Area Road No.4, Sikandrabad Distt bulandshahar, UP-203205	
Synonyms	Hypochlorite,Liquid Chlorine Solution	
Emergency Contact Details	Phone no.	+91 8368392953
	E-mail	Hq@thesuntek.com

SECTION 2: Hazards Identification

Emergency Overview

May be corrosive to metals. Causes severe skin burns and eye damage. May cause respiratory irritation. Very toxic to aquatic life.

Potential Health Effects

Inhalation	Cause respiratory irritation
Skin	Skin irritation
Eyes	Eye irritation, Eye damages
Ingestion	Cause respiratory irritations as gas form
Disposal	Dispose of contents/container to an approved waste disposal plant

SECTION 3: Composition/information on ingredients

Component	CAS-No.	EC-No.	Weight %
Sodium Hypochlorite Bleach	7681-52-9	231-668-3	12.5% V/V
Sodium Hydroxide	1310-73-2	215-185-5	4.0%

SECTION 4: First Aid Measures

Inhalation	Move person to fresh air. If person is not breathing, call a doctor, then give artificial respiration, preferably mouth-to-mouth if possible.
Skin	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
Eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a doctor for treatment advice.
Ingestion	Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by doctor. Do not give anything by mouth to an unconscious person.
Most important symptoms/effects	Not available.
Notes to Physician	Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: Fire Fighting Measures

Suitable Extinguishing Media	Water fog. Foam. Dry chemical powder. Carbon dioxide.		
Flash Point	Not applicable.	Explosion Limits	
Auto ignition Temperature	Not applicable.	Upper	No data available
		Lower	No data available
Hazardous Combustion Products	Not pertinent.		

Specific Hazards Arising from the Chemical	May decompose, generating irritating chlorine gas. Do not use Mono Ammonium Phosphate (MAP) fire extinguishers. Such use may cause explosion with release of toxic gases.

NFPA: Health: 3 Flammability: 0 Instability: 1 Special hazards: OX

SECTION 6: Accidental Release Measures

Personal Precautions	Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Absorb spillage to prevent material damage. Local authorities should be advised if significant spillages cannot be contained.
Environmental precautions	Do not discharge into drains, water courses or onto the ground. Environmental manager must be informed of all major releases.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Never return spills in original containers for re-use.

SECTION 7: Handling and Storage

Handling	Avoid contact with skin or eyes. Do not ingest. Avoid inhalation of vapour or mist. Wear protective equipment if necessary. Mix only with water in accordance with label directions. Mixing this product with ammonia, acids, detergents, etc. or with organic materials, e.g. faces, urine, etc. will release chlorine gas, which is irritating to eyes, lungs, and mucous membranes.
Storage	Do not freeze. Store in a cool, shaded outdoor area. Inside storage should be in a cool, dry, well-ventilated area. To maintain hypochlorite strength, do not store in direct or heated indoor areas. Keep in original vented container. Keep container closed when not in use. Do not store adjacent to chemicals that may react if spillage occurs. If closed containers become heated, vent to release decomposition products (mainly oxygen under normal decomposition).

SECTION 8: Exposure Controls/Personal Protection

Exposure Guidelines:

Component	OSHA PEL	ACGIH TWA
Sodium Hypochlorite	Not established	Not established
Chlorine*	0.5 ppm	0.5 ppm

Chlorine is unlikely to be present as a decomposition product, but may be present in incidents of accidental mixing with other chemicals.

Engineering Measures	Local exhaust ventilation to maintain levels below STEL (Short Term Exposure Limit) of 1 ppm as chlorine.

Personal Protective Equipment

Eye/face Protection	Wear safety glasses, goggles or face shield to prevent eye contact.
Skin and body protection	Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Butyl rubber, Neoprene, or Nitrile Gloves should be worn when handling this material. Wear chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing promptly and wash before reuse. Clean protective equipment before reuse.
Respiratory Protection	Avoid breathing vapour or mist. When airborne exposure limits are exceeded (see below), use approved respiratory protection equipment appropriate to the material and/or its components. Full face piece equipment is recommended and, if used, replaces need for face shield

	and chemical goggles. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive pressure, self-contained breathing apparatus.

SECTION 9: Physical and Chemical Properties

Appearance	Greenish yellow liquid	Water solubility	Mixes infinitely with water.
Odour	Pungent	Auto-ignition temperature	No information available.
pH	11.2 – 11.4 (1% solution)	Viscosity	1.75 - 2.50 centipoises (varies with temperature)
Melting point/freezing Point	- 16 °C	Flammability (solid, gas)	Not flammable.
Initial boiling point and boiling range	Slowly decomposes above 40 0C. 12.1 mm Hg @ 20 0C	Decomposition temperature Relative density	Decomposes @ 110°C
Vapour pressure	2.61 (air=1)	Oxidizing properties	1.2 g/mL @ 20 0C
Vapour density			

SECTION 10: Stability and Reactivity

Reactive Hazard	Rate of decomposition increases with heat. May develop chlorine if mixed with acidic solutions.
Stability	Unstable at temperatures above 40°C, in sunlight, and in contact with acid.
Conditions to Avoid	High heat, ultraviolet light.
Incompatible Materials	Oxidizing agents, acids, nitrogen containing organics, metals, iron, copper, nickel, cobalt, organic materials, and ammonia.
Hazardous Decomposition Products	Chlorine (by reaction with acids), oxygen (by reaction with nickel, copper, tin, manganese, iron), sodium chloride, sodium chlorate, with increased temperature.
Hazardous Polymerization	Will not occur.
Hazardous Reactions	No information available.

SECTION 11: Toxicological Information

Acute toxicity	Oral Toxicity (LD50): 8.91 g/kg (Rat)
Carcinogenicity	Not considered to be carcinogenic (IARC and ACGIH)

SECTION 12: Ecological Information

Eco toxicity	Sodium hypochlorite is low in toxicity to avian wildlife, but it is highly toxic to freshwater fish and invertebrates.
Other	In seawater, chlorine levels decline rapidly; however, hypobromite (which is acutely toxic to aquatic organisms) is formed.

SECTION 13: Disposal Considerations

Waste treatment methods	Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a local regulations.
Product	Do not contaminate food or feed by storage, disposal, or cleaning of equipment. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer.
Contaminated packaging	

SECTION 14: Transport Information

UN number	1791 Hypochlorite Solutions (Sodium Hypochlorite) 8
UN proper shipping name	
Transport hazard class	

Packaging group	III
Environmental hazards	Yes

SECTION 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation.

SECTION 16: Other Information

Disclaimer The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.