

MATERIAL SAFETY DATA SHEET
SODIUM HYPOCHLORITE

1 PRODUCT & COMPANY IDENTIFICATION

Product Name:	Sodium Hypochlorite	Supplier:	ASES CHEMICAL WORKS.
INCI Name:	Sodium Salt, Liquid Bleach	Address:	Brahm Bagh, Jalori Gate Jodhpur - 342001 Rajasthan-India
CAS Number:	7681-52-9	Phone:	+91-9636889954
Formula:	NaClO	Web:	www.ases.in
Product Form:	Liquid	Email :	ecom@ases.in
Product Use:	Industrial and professional use. Disinfectant.		

2 HAZARDS IDENTIFICATION

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

Label elements:

Hazard pictograms (CLP):



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

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	EC No	Formula	Mol Weight	Weight
Sodium Hypochlorite	7681-52-9	231-668-3	NaClO	74.44 g/mol	12.5% V/V
Sodium Hydroxide	1310-73-2	215-185-5			4.0%

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.
Eye:	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.
Instigation:	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.
Physician Notes	Probable mucosal damage may contraindicate the use of gastric lavage.

5 FIRE-FIGHTING MEASURES

Suitable extinguishing media	Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	Do not use extinguishing media containing water
Fire hazard	May decompose, generating irritating chlorine gas. Do not use Mono Ammonium Phosphate fire extinguishers. Such use may cause explosion with release of toxic gases.
Advice for firefighters	Do not enter fire area without proper protective equipment and respiratory protection.

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:	Avoid release to the environment.
Clean up procedure :	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.

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7 HANDLING & 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).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	Local exhaust ventilation to maintain levels below STEL of 1 ppm as chlorine
Eye protection:	Chemical goggles or safety glasses.
Skin and body protection :	Handle with gloves, Use Impervious clothing. Remove contaminated clothing promptly and wash before reuse. Clean protective equipment before reuse.
Respiratory protection :	Avoid breathing vapour or mist. Use approved respiratory protection equipment.
General information:	When using do not eat, drink, smoke, sniff.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Greenish yellow liquid	Flash point :	Not pertinent
Odour :	Pungent	Auto-ignition temperature :	No data available
pH @ 1% solution) :	11.2 – 11.4	Viscosity:	1.75 - 2.50 centipoises
Melting/Freezing point :	-16°C	Flammability (solid, gas) :	Not flammable.
Boiling point :	40°C	Decomposition temperature :	@ 110°C
Vapour pressure :	12.1 mm Hg @ 20 0C	Relative density :	1.2 g/mL @ 20 0C
Vapour density:	2.61 (air=1)	Oxidising properties :	Stable
Solubility : Water:	Soluble in water	Explosive limits :	No data available

10 STABILITY AND REACTIVITY

Reactivity:	Rate of decomposition increases with heat. May develop chlorine if mixed with acidic solutions.
Chemical Stability:	Unstable at temperatures above 40°C, in sunlight, and in contact with acid..
Hazardous Polymerization:	Will not occur.
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.

11 TOXICOLOGICAL INFORMATION

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

12 ECOLOGICAL INFORMATION

Eco toxicity	Sodium hypochlorite is low in toxicity to avian wildlife, but it is highly toxic to fresh water fish and invertebrates.
Other adverse effects:	In seawater, chlorine levels decline rapidly; however, hypobromite (which is acutely toxic to aquatic organisms) is formed.
Persistence and degradability	No data available
Bio accumulative potential	No data available
Mobility in soil	No data available

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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 reinstates that cannot be used should be diluted with water before disposal in a sanitary sewer.

14 TRANSPORT INFORMATION

UN-No. (ADR/ IMDG/IATA/AND/RID):	1791
Proper Shipping Name(ADR/ IMDG/IATA/AND/RID):	Hypochlorite Solutions (Sodium Hypochlorite)
Transport hazard class(es) (ADR/ IMDG/IATA/AND/RID):	8
Packaging group	III
Environmental hazards	Yes

15 REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation

Chemical Safety Assessment: A Chemical Safety Assessment has not been carried out.

16 OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and ASES CHEMICAL WORKS assume no liability resulting from its use.