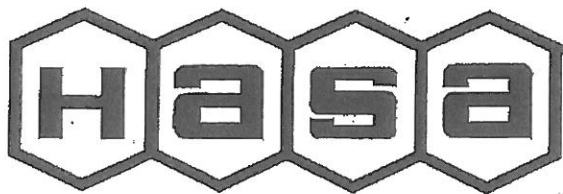


80579

Line # U-001



HASA BLEACH

Material Safety Data Sheet

12.5% Sodium Hypochlorite

Emergency 24 Hour Telephone: **CHEMTREC** 800.424.9300

Corporate Headquarter: Hasa Inc.
 23119 Drayton Street
 Saugus, California 91350
 Telephone • 661.259.5848
 Fax • 661.259.1538

HASA BLEACH
 Material Safety Data Sheet (MSDS No. 103)

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1	Product Identification:	
1.1.1	Product Name:	HASA BLEACH
1.1.2	CAS # (Chemical Abstracts Service):	7681-52-9
1.1.3	RTECS (Registry of Toxic Effects of Chemical Substances):	NH3486300
1.1.4	EINECS (European Inventory of Existing Commercial Substances):	231-668-3
1.1.5	EC Number:	231-668-3
1.1.6	Synonym:	Bleach, Hypo, Hypochlorite, Liquid Chlorine Solution
1.1.7	Chemical Name:	Sodium Hypochlorite
1.1.8	Chemical Formula:	NaOCl
1.2	Recommended Uses:	Laundry and cleaning.
1.3	Company Identification:	Hasa Inc. 23119 Drayton Street Saugus, California 91350
1.4	Emergency Telephone Number:	CHEMTREC 1-800-424-9300 (24 hour)
1.5	Non-Emergency Assistance:	661-259-5848 (8 AM – 5 PM PST / PDT)

SECTION 2: EMERGENCY OVERVIEW and HAZARD IDENTIFICATION

2.1	Emergency Overview.	DANGER. CORROSIVE. Causes eye damage. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin, or on clothing. Wear safety glasses or goggles or face shield, protective clothing, and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until strong odors have dissipated.
2.2	Routes of Entry:	Eyes, skin absorption, inhalation, ingestion.
2.3	Short Term Exposure:	
2.3.1	Eyes:	Causes serious eye irritation. Blurred vision. May cause impairment of vision and corneal damage.
2.3.2	Skin:	May cause skin irritation and/or dermatitis. Prolonged skin exposure may cause destruction of the dermis with impairment of the skin to regenerate at site of contact.
2.3.3	Inhalation:	Accidental mixing with other chemicals or decomposition of sodium hypochlorite vapor is irritating to the respiratory system.
2.3.4	Ingestion:	Ingestion of high concentrations may cause injuries to gastrointestinal tract, liver, kidneys and central nervous system. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
2.3.5	Aggravated Medical Conditions:	Asthma, heart disease, respiratory disorders.
2.4	Long Term Exposure:	Based on the toxicity profile and exposure scenarios for sodium hypochlorite, EPA concludes that the risks from chronic and sub-chronic exposure to low levels of this pesticide are minimal and without consequence to human health.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

	Ingredient	Synonyms	CAS No.	Approx. Wt. %
3.1	Sodium Hypochlorite	Bleach	7681-52-9	12.5%
3.2	Sodium Hydroxide	Caustic Soda	1310-73-2	0.2%

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Small Spill:	In case of spill, flood area where spill has occurred with large quantities of water. With permission from local authorities, diluted product may be flushed to a sanitary sewer. Product may also be absorbed with sand or diatomaceous earth. Absorbed products must be disposed of in accordance with applicable Federal, State, and/or local regulations. Contact Hasa Inc. for guidance.
6.2	Large Spill:	If possible without personal risk, stop leak. Try to prevent the materials from entering drains, waterways, or sewers. Absorb with sand, diatomaceous earth or similar products and dispose of in accordance with local regulations. Call Hasa Inc. for advice.

SECTION 7: HANDLING AND STORAGE

7.1	Handling:	<ul style="list-style-type: none"> • Avoid contact with skin or eyes. • Do not ingest. • Avoid inhalation of vapor 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. feces, urine, etc. will release chlorine gas, which is irritating to eyes, lungs, and mucous membranes.
7.2	Hygiene Measures:	<ul style="list-style-type: none"> • Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. • While handling this product, avoid eating, drinking or smoking.
7.3	Storage:	<ul style="list-style-type: none"> • 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 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Physical State and Appearance:	Liquid with pale yellow color.
9.2	Odor:	Bleach
9.3	Odor Threshold:	Not applicable.
9.4	pH (1% solution):	11.2 – 11.4
9.5	Boiling Point:	Not applicable. Decomposes @ 110°C (230°F)
9.6	Melting Point:	Not applicable.
9.7	Freezing Point:	-23.3°C (-10°F)
9.8	Evaporation Rate (BuAc=1):	Not available.
9.9	Flammable Limits:	Not applicable.
9.10	Vapor Pressure:	12.1 mm Hg @ 20°C (68°F)
9.11	Vapor Density: (Air=1)	2.61
9.12	Relative Density or Specific Gravity (H₂O=1):	1.2 g/mL or 10 lb/gallon @ 20°C (68°F)
9.13	Solubility in Water:	Mixes infinitely with water.
9.14	Partition Coefficient: n-octanol / water:	Not applicable.
9.15	Viscosity:	1.75 - 2.50 centipoises (varies with temperature)
9.16	Volatility:	Not applicable.
9.17	Molecular Weight:	74.5 g/mole
9.18	Water / Oil Distribution Coefficient:	Not applicable.
9.19	Dispersion Properties:	Not applicable.

SECTION 10: STABILITY AND REACTIVITY

10.1	Stability:	Stable under normal conditions of storage, handling, and use.
10.2	Instability / Decomposition Temperature:	All bleach decomposition is dependant on temperature. For any given temperature, the higher the strength, the faster it decomposes. In summary, for every 10°C increase in storage temperature, the sodium hypo-chlorite will decompose at an increased rate factor of approximately 3.5.
10.3	Conditions of Instability:	High heat, ultraviolet light.
10.4	Incompatibility with Various Substances:	Oxidizing agents, acids, nitrogen containing organics, metals, iron, copper, nickel, cobalt, organic materials, and ammonia.
10.5	Corrosivity:	Corrosive to eyes and skin.
10.6	Special Remarks on Reactivity:	Rate of decomposition increases with heat. May develop chlorine if mixed with acidic solutions.
10.7	Special Remarks on Corrosivity:	None.
10.8	Hazardous Polymerization:	Will not occur.

SECTION 12: ECOLOGICAL INFORMATION

12.1	Ecotoxicity:	Sodium hypochlorite is low in toxicity to avian wildlife, but it is highly toxic to freshwater fish and invertebrates.
12.1.1	Freshwater Fish Toxicity:	<p>Atlantic Herring (<i>clupea harengus</i>) $LC_{50} = 0.033 - 0.097$ mg/l/96 hr, flow through bioassay (pH: 8)</p> <p>Shiner Perch (<i>cymatogaster aggregata</i>) $LC_{50} = 0.045 - 0.098$ mg/l/96 hr, flow through bioassay (pH: 8)</p> <p>Three Spine Stickleback (<i>gasterosteus aculeatus</i>) $LC_{50} = 0.141 - 0.193$ mg/l/96 hr, flow through bioassay (pH: 8)</p> <p>Pink Salmon (<i>oncorhynchus gorbuscha</i>) $LC_{50} = 0.023 - 0.052$ mg/l/96 hr, flow through bioassay (pH: 8)</p> <p>Coho Salmon (<i>oncorhynchus kisutch</i>) $LC_{50} = 0.026 - 0.038$ mg/l/96 hr, flow through bioassay (pH: 8)</p> <p>English Sole (<i>parophrys vetulus</i>) $LC_{50} = 0.044 - 0.144$ mg/l/96 hr, flow through bioassay (pH: 8)</p> <p>Fat Head Minnow (<i>pimephales promelas</i>) $LC_{50} = 0.22 - 0.62$ mg/l/96 hr, flow through bioassay (pH: 7)</p>
12.1.2	Invertebrate Toxicity:	<p>Water Flea (<i>ceriodaphnia</i> sp. 0) $LC_{50} = 0.006$ mg/l/24 hr</p> <p>Water Flea (<i>daphnia magna</i>) $LC_{50} = 0.07 - 0.7$ mg/l/24 hr</p> <p>Water Flea (<i>daphnia magna</i>) $LC_{50} = 2.1$ mg/l/96 hr</p> <p>Fresh Water Shrimp (<i>gammarus fasciatus</i>) $LC_{50} = 0.4$ mg/l/96 hr</p> <p>No common name (<i>nitocra spinipes</i>) $LC_{50} = 0.40$ mg/l/96 hr</p> <p>Grass Shrimp (<i>palaemonetes pugio</i>) $LC_{50} = 0.52$ mg/l/96 hr</p>
12.2	Persistence:	No data available.
12.3	Environmental Fate:	In fresh water, sodium hypochlorite breaks down rapidly into non-toxic compounds when exposed to sunlight. In seawater, chlorine levels decline rapidly; however, hypobromite (which is acutely toxic to aquatic organisms) is formed. EPA believes that the risk of acute exposure to aquatic organisms is sufficiently mitigated by precautionary labeling and National Pollutant Discharge Elimination System (NPDES) permit requirements.
12.4	Bioconcentration:	This material is not expected to bioconcentrate in organisms.
12.5	Biodegradation:	This material is inorganic and not subject to biodegradation.

SECTION 13: DISPOSAL CONSIDERATIONS

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. This product can be neutralized with sodium bisulfite, sodium thiosulfate, sodium sulfite. Do not confuse these products with sulfates or bisulfates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination system (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not contaminate water containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Dispose of in accordance with all applicable local, County, State, and Federal regulations.

SECTION 15: REGULATORY INFORMATION

15.1	U.S. Regulations:	
15.1.1	OSHA HAZCOM (Hazard Communication)	This material is considered hazardous under the HAZCOM Standard (29 CFR 1910.1200)
15.1.2	OSHA PSM (Process Safety Management)	Not regulated under PSM Standard (29 CFR 1910.119)
15.1.3	EPA FIFRA (Federal Insecticide, Fungicide and Rodenticide Act)	Not regulated under FIFRA standard.
15.1.4	EPA TSCA (Toxic Substance Control Act)	All components are listed or exempted. TSCA 12(b): This product is not subject to export notification.
15.1.5	EPA CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)	Reportable Quantity (RQ): 45.4 kg (100 lbs) or 80 gallons (based on 12.5% active ingredient).
15.1.6	EPA RMP (Risk Management Plan)	Not listed. (40 CFR 68.130)
15.2	State of California Regulations:	
15.2.1	Safe Drinking Water and Toxic Enforcement Act of 1986 [Proposition 65, California only]: Small quantities – less than 100 ppm (parts per million) – of impurities, including bromates, may be found in all chlorinating products, including this product. Bromates are derived from bromides, which are present in sodium chloride (table salt) from which chlorine is manufactured. Additional small quantities of bromates may be generated during the disinfection process. Bromates are known by the State of California to cause cancer when administered by the oral (drinking or ingesting) route. Read and follow label directions and use care when handling or using this product. The US Environmental Protection Agency has established a maximum contaminant level (MCL) for bromates in drinking water at 10 ppb (parts per billion). Application of this product in accordance with label directions at use dilution will not exceed this level. This warning is provided pursuant to Proposition 65, Chapter 6.6 of the California Health and Safety Code, which requires the Governor of California to publish a list of chemicals "known to the state to cause cancer or reproductive toxicity." This list is compiled in accordance with the procedures established under the proposition, and can be obtained on the internet from California's Office of Environmental Health Hazard Assessment at http://www.oehha.ca.gov .	
15.2.2	CDPR (California Department of Pesticide Regulation)	Not regulated.
15.2.3	CalARP (California Accidental Release Prevention Program)	Not regulated.
15.3	Canada Regulations:	
15.3.1	WHMIS (Workplace Hazardous Materials Information System)	<ul style="list-style-type: none"> Classification: E (Corrosive Materials) Health Effects Criteria Met by this Chemical: <ul style="list-style-type: none"> E - Corrosive to skin E - TDG class 8 - corrosive substance Ingredient Disclosure List: Included for disclosure at 1% or greater.
15.3.2	DSL (Domestic Substances List)	All components of this product are on the DSL.
15.4	International Inventory:	
15.4.1	AICS (Australian Inventory of Chemical Substances)	On inventory or in compliance with inventory.
15.4.2	KECI (Korean Existing Chemicals Inventory)	On inventory or in compliance with inventory.
15.4.3	PICCS (Philippine Inventory of Chemicals and Chemical Substances)	On inventory or in compliance with inventory.
15.4.4	IECSC (Inventory of Existing Chemical Substances in China)	On inventory or in compliance with inventory.
15.4.5	NZIoC (New Zealand Inventory of Chemicals)	On inventory or in compliance with inventory.