

HASA SANI-CLOR

Safety Data Sheet

12.5% Sodium Hypochlorite

Emergency 24 Hour Telephone:

CHEMTREC 800.424.9300

Corporate Headquarters:

Hasa Inc. P.O. Box 802736 Santa Clarita, CA 91355 Telephone • 661.259.5848 Fax • 661.259.1538

	SECTION 1: IDENTIFICATION				
1.1	Produ	ct Identification:			
	1.1.1	Product Name:	HASA SANI-CLOR		
	1.1.2	CAS # (Chemical Abstracts	7681-52-9		
		Service):			
	1.1.3	RTECS (Registry of Toxic Effects	NH3486300		
		of Chemical Substances):			
	1.1.4	EINECS (European Inventory of	231-668-3		
		Existing Commercial Substances):			
	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:	NaOCI		
1.2	Recor	nmended Uses:	Sanitizer of swimming pool and spa water.		
1.3	Comp	any Identification:	Hasa Inc.		
			P. O. Box 802736		
			Santa Clarita, CA 91355		
1.4	1.4 Emergency Telephone Number:		CHEMTREC		
			1-800-424-9300		
			(24 hour Emergency Telephone)		
1.5	Non-E	Emergency Assistance:	661-259-5848		
			(8 AM – 5 PM PST / PDT)		

SE	CTION 2: HAZARD(S)	IDENTIFICATION	S T	
HEALTH HAZARD	Skin corrosion / irritation:	Category 1	afe	
	Serious Eye damage / Eye Irritation	Category 1	HASA SANI-CL	
	Specific target organ toxicity single exposure	y, Category 3 (respiratory tract irritation)	ta Sh	
ENVIRONMENTAL HAZARD	Hazardous to the aquatic environment, acute hazard	Category 1	leet ()	
PHYSICAL HAZARD	Corrosive to metals.	Category 1	SD C	
SYMBOLS	A CONTRACTOR		HASA SANI-CLOR Safety Data Sheet (SDS No. 101)	
SIGNAL WORD		DANGER		
HAZARD STATEMENT		Causes severe skin burns and eye atory irritation. Very toxic to aquatic life.		
PRECAUTIONARY	Prevention			
STATEMENT	Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist or vapor. Use only outdoors or in a well- ventilated area. Wash thoroughly after handling. Keep only in original container. Avoid release to the environment.			
		Response		
	breathing. If on skin (or hair): Take off i Rinse skin with water/showe several minutes. Remove co Continue rinsing. Immediate contaminated clothing before Absorb spillage to prevent m	to fresh air and keep comfortable for immediately all contaminated clothing. er. If in eyes: Rinse cautiously with water for ontact lenses, if present and easy to do. ely call a poison center/doctor. Wash re reuse. naterial damage. Collect spillage.		
		rage and Disposal		
	locked up. Store in corrosive	nts in accordance with local, regional,		

	SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS				
	Ingredient	Synonyms	CAS No.	Weight %	
3.1	Sodium Hypochlorite	Bleach	7681-52-9	12.5%	
3.2	Sodium Hydroxide	Caustic Soda	1310-73-2	0.2%	

		SECTION 4: FIRST AID MEASURES	ເ ເ S S
4.1	IF IN 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 poison control center or doctor for treatment advice. 	HASA S Safety Data t
4.2	IF ON SKIN OR CLOTHING	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. 	ANI-
4.3	IF INHALED	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. 	SDS No. 1
4.4	IF SWALLOWED	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. 	101)
	1	HOT LINE NUMBER	
gc		ntainer or label with you when calling a poison control center or doctor, or You may also contact 1-800-424-9300 for emergency medical treatment	
		NOTE TO PHYSICIAN	
Dr	obable mucosal d	amago may contraindicato the use of gastric layago	i II – – – – – – – – – – – – – – – – – –

Probable mucosal damage may contraindicate the use of gastric lavage.

		SECTION 5: FIRE	FIGHTING MEASURES
5.1	Flash	Point:	Not applicable.
5.2	Flamr	nability:	Nonflammable and noncombustible.
5.3	Auto-	Ignition Temperature:	Not applicable.
5.4	Produ	cts of Combustion:	Not pertinent.
5.5	Fire H	lazards:	May decompose, generating irritating chlorine gas.
5.6	Explo	sion Hazards:	Not explosive.
5.7	Fire F	Fire Fighting Media and Instructions:	
	5.7.1	Extinguishing Media:	Water fog. Foam. Dry chemical powder. Carbon dioxide.
	5.7.2	Small Fires:	Use carbon dioxide, or water spray.
	5.7.3	Large Fires:	Use flooding quantities of water as fog.
5.8	Special Remarks on Fire Hazards:		Do not use Mono Ammonium Phosphate (MAP) fire extinguishers. Such use may cause explosion with release of toxic gases.

SECTION 6:	ACCIDENTAL RELEASE MEASURES
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6.1	Small Spill:	Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
6.2	Large Spill:	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. For waste disposal, see Section 13 of the SDS.
6.3	Personal Precautions, Protective Equipment & Emergency Procedures:	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. For personal protection, see Section 8 of the SDS.
6.4		Do not discharge into drains, water courses or onto the ground.
	Precautions:	Environmental manager must be informed of all major releases.

	SECTION 7: HANDLING AND STORAGE				
7.1	Handling:	 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:	 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:	 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). 			

.1			Local exhaust ventilation to maintain levels below STEL (Short Term Exposure Limit) of 1 ppm as chlorine.		
3.2	Perso	onal Protection:			
	8.2.1	2.1 Eye / Face Protection: Wear safety glass prevent eye conta		s, goggles or face shield to	
	8.2.2	Skin Protection:	Wear appropriate chemical clothing and chemical resist skin contact. Butyl rubber, N Gloves should be worn whe material. Wear chemical res a rubber apron when splash immediately if skin is contan contaminated clothing prom reuse. Clean protective equi	ant gloves to prevent leoprene, or Nitrile n handling this istant clothing such as ing may occur. Rinse ninated. Remove ptly and wash before	
	8.2.3	Respiratory Protection:	Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece 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.		
	8.2.4	Other Safety Equipment:	Eye wash facility and emerg be in close proximity.		
8.3	Exposure Limits:		Sodium Hypochlorite	Chlorine*	
	8.3.1	AIHA (American Industrial Hygiene Association) / WEEL (Workplace Environmental Exposure Level guides) 2010	2 mg/m ³ : 15 minute. (Short-term time weighted average)	Not established	
	8.3.2	ACGIH (American Conference of Governmental Industrial Hygienists) TWA (Time Weighted Average)	Not established.	0.5 ppm	
	8.3.3	ACGIH STEL (Short Term Exposure Limit)	Not established.	1 ppm	
	8.3.4	OSHA PEL (Permisible Exposure Limit)	Not established.	0.5 ppm	
	8.3.5	ACGIH Ceiling	Not established.	Not established	
	8.3.6	NIOSH (National Institute for Occupational Safety & Health) IDLH (Immediate Danger to Life & Health)	Not established.	10 ppm	
-	8.3.7	OSHA STEL (Short Term Exposure Limit)	Not established.	1 ppm as Cl ₂	
			Not established.		

	SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES		
9.1	Appearance:	Greenish yellow liquid.	
9.2	Odor:	Pungent.	
9.3	Odor Threshold:	0.9 mg/m ³ .	
9.4	pH:	11.2 – 11.4 (1% solution)	
9.5	Melting Point:	Not pertinent.	
9.6	Freezing point:	-23.3 °C (-10 °F)	
9.7	Boiling Point & Boiling Range:	Decomposes @ 110 ℃ (230 °F)	
9.8	Flash Point:	No information available.	
9.9	Evaporation Rate:	No information available.	
9.10	Flammability (solid, gas):	Not flammable.	
9.11	Upper / Lower Flammability or	No information available.	
	Explosive Limits:		
9.12	Vapor Pressure:	12.1 mm Hg @ 20℃ (68°F)	
9.13	Vapor Density:	2.61 (air=1)	
9.14	2.1	1.2 g/mL or 10 lb/gallon @ 20 °C (68 °F)	
	Gravity):		
9.15	Solubility in Water:	Mixes infinitely with water.	
9.16	Partition Coefficient: (n-octanol /	No information available.	
	water):		
9.17	Auto-ignition Temperature:	No information available.	
9.18	Decomposition Temperature:	Decomposes @ 110 ℃ (230 °F)	
9.19	Molecular Weight:	74.5 g/mole	
9.20	Viscosity:	1.75 - 2.50 centipoises (varies with temperature)	

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Eyes, skin, ingestion, dermal absorption.			
11.2	Acute Toxicity:				
	11.2.1 Oral Toxicity (LD ₅₀):	3-5 g/kg (rat)			
	11.2.2 Dermal Toxicity (LD ₅₀):	>2 g/kg (rabbit)			
	11.2.3 Primary Eye Irritation:	Corrosive			
	11.2.4 Primary Skin Irritation:	Corrosive			
	11.2.5 Inhalation Toxicity (LC ₅₀):	No data available.			
11.3	Chronic Effects (Human Risk Assessment):	Based on the toxicity profile and exposure scenarios for sodium hypochlorite, EPA concludes that the risks from chronic and subchronic exposure to low levels of these pesticides are minimal and without consequence to human health.			
11.4	Tolerance Requirement:	Exempt (EPA document "Index to Pesticide Chemical Names, Part 180 Tolerance Information, and Food and Feed Commodities (by Commodity)" July 2010			

	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:		Fish	Atlantic Herring (clupea harengus) LC ₅₀ = 0.033 - 0.097 mg//l/96 hr, flow through bioassay (pH: 8) Shiner Perch (cymatogaster aggregata) LC ₅₀ = 0.045 - 0.098 mg/l/96 hr, flow through bioassay (pH: 8) Three Spine Stickleback (gasterosteus aculeatus) LC ₅₀ = 0.141 - 0.193 mg/l/96 hr, flow through bioassay (pH: 8) Pink Salmon (oncorhynchus gorbuscha) LC ₅₀ = 0.023 - 0.052 mg/l/96 hr, flow through bioassay (pH: 8) Coho Salmon (oncorhynchus kisutch) LC ₅₀ = 0.026 - 0.038 mg/l/96 hr, flow through bioassay (pH: 8) English Sole (parophrys vetulus) LC ₅₀ = 0.044 - 0.144 mg/l/96 hr, flow through bioassay (pH: 8) Fat Head Minnow (pimephales promelas) LC ₅₀ = 0.22 - 0.62 mg/l/96 hr, flow through bioassay (pH: 7)		
	12.1.2	Invertebrate Toxicity:	Water Flea (ceriodaphnia sp. 0) $LC_{50} = 0.006 \text{ mg/l/24 hr}$ Water Flea (daphnia magna) $LC_{50} = 0.07 - 0.7 \text{ mg/l/24 hr}$ Water Flea (daphnia magna) $LC_{50} = 2.1 \text{ mg/l/96 hr}$ Fresh Water Shrimp (gammarus fasciatus) $LC_{50} = 0.4 \text{ mg/l/96 hr}$ No common name (nitocra spinipes) $LC_{50} = 0.40 \text{ mg/l/96 hr}$ Grass Shrimp (palaemonetes pugio) $LC_{50} = 0.52 \text{ mg/l/96 hr}$		
12.2	12.2 Persistence:		No data available.		
12.3 Environmental Fate:		onmental 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	Bioco	ncentration:	This material is not expected to bioconcentrate in organisms.		
12.5 Biodegradation:		gradation:	This material is inorganic and not subject to biodegradation.		

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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 14: TRANSPORT INFORMATION					
14.1	Inside	containers 1.3 gallons or le	ess.			
	14.1.1 DOT Classification:		Consumer Commodity.			
	14.1.2 DOT Hazard Class:		ORM-D.			
	14.1.3	Marking:	Consumer Commodity, ORM-D.			
	14.1.4	Marine Pollutant:	Not listed in Appendix B of the Hazardous Material Table.			
	14.1.5	Deposit Container Returns:	RESIDUE: LAST CONTAINED CONSUMER COMMODITY ORM-D.			
14.2	Inside	containers or single contain	iners exceeding 1.3 gallons.			
	14.2.1	DOT Classification:	Hypochlorite Solutions.			
	14.2.2	DOT Hazard Class:	8, UN1791, P.G. III.			
	14.2.3	Label:	Corrosive 8.			
	14.2.4	Deposit Container Returns:	RESIDUE: LAST CONTAINED, UN 1791, HYPOCHLORITE SOLUTIONS, 8, PGIII,			
14.3	Reportable Quantity (RQ):		100 lb (45.4 kg) or 80 gallons (based on 12.5% active ingredient)			
relatir						

SECTION 15: REGULATORY INFORMATION

15.1	U.S. F	legulations:			
	15.1.1	OSHA HAZCOM (Hazard			ered hazardous under the
		Communication)			CFR 1910.1200)
	15.1.2	OSHA PSM (Process Safety Management)	Not regulat	ted under PS	M Standard (29 CFR 1910.119)
	15.1.3	EPA FIFRA (Federal Insecticide,		No. :10897-4	
		Fungicide and Rodenticide Act)		•	nder 40 CFR 152.10)
		EPA TSCA (Toxic Substance Control Act)	TSCA 12(b notification	o): This produ	ed or exempted. uct is not subject to export
	15.1.5	EPA CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)			Q): 45.4 kg (100 lbs) or 80 gallons e ingredient).
	15.1.6		Not listed.	(40 CFR 68.	130)
15.2	State	of California Regulations:			
	15.2.1 15.2.2 15.2.3	California only]: Small quantities including bromates, may be found in Bromates are derived from bromide which chlorine is manufactured. Ac during the disinfection process. Bro cancer when administered by the on directions and use care when hand Protection Agency has established drinking water at 10 ppb (parts per l directions at use dilution will not exc This warning is provided pursuant to Safety Code, which requires the Go the State to cause cancer or reprod procedures established under the p California's Office of Environmental CDPR (California Department of P	I less than n all chlorina es, which are ditional sma omates are k ral (drinking ling or using a maximum billion). App ceed this lev o Proposition overnor of Ca luctive toxicit roposition, a Health Haza esticide Reg	100 ppm (pa ting products present in s all quantities anown by the or ingesting) this product contaminant lication of thi el. n 65, Chapte alifornia to pu ty." This list and can be of ard Assessm ulation)	arts per million) – of impurities, s, including this product. odium chloride (table salt) from of bromates may be generated State of California to cause route. Read and follow label . The US Environmental level (MCL) for bromates in is product in accordance with label r 6.6 of the California Health and ublish a list of chemicals "known to is compiled in accordance with the btained on the internet from
15.3	Canad	a Regulations:			
	15.3.1	WHMIS (Workplace Hazardous Materials Information System) DSL (Domestic Substances List)	 Health I E - C E - T Ingredia 1% or g 	Effects Criter orrosive to s DG class 8 - ent Disclosur reater.	prrosive Materials) ria Met by this Chemical: kin corrosive substance e List: Included for disclosure at product are on the DSL.
15.4					
15.4		ational Inventory:	On invente	ny or in compliance with inventory	
	15.4.1	Substances)			ry or in compliance with inventory.
		KECI (Korean Existing Chemicals			ry or in compliance with inventory.
		PICCS (Philippine Inventory of Che and Chemical Substances)			ry or in compliance with inventory.
	15.4.4	IECSC (Inventory of Existing Chem Substances in China)	nical		ry or in compliance with inventory.
	15.4.5	NZIOC (New Zealand Inventory of Chemicals)		On invento	ry or in compliance with inventory.

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		SECTION 16: OTHE	R INFORMATIO	N
16.1	HMIS	III (Hazardous Materials Identification Systemeters)	em):	
	16.1.1	HEALTH	2	
	16.1.2	FLAMMABILITY	0	
	16.1.3	PHYSICAL HAZARD	1	
	16.1.4	PERSONAL PROTECTION	See Section 8.	
16.2	NFPA	704 (National Fire Protection Association)	:	
	16.2.1	HEALTH	2	
	16.2.2	FLAMMABILITY	0	
	16.2.3	INSTABILITY	0	
	16.2.4	SPECIAL	None	
16.3		ational Fire Code / International ng Code:	Irritant.	
16.4	ANSI	(American National Standards Institute):		
	16.4.1	Hazardous Industrial Chemicals - SDS-Preparation:	Complies with AN	SI Z400.1 – 2004.
	16.4.2	Hazardous Industrial Chemicals - Precautionary Labeling:	Complies with ANS	SI Z129.1 – 2006.

Note: The information contained herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge and belief. NO WARRANTY OR GUARANTEE, express or implied, is made regarding the product performance, product stability, or as to any other condition of use, handling, transportation, and storage. Customer use, handling, transportation, and storage may involve additional safety and/or performance considerations. Our technical personnel will be happy to respond to questions regarding safe handling, storage, transportation, and use procedures. The safe handling, storage, transportation, and use procedures remain the sole responsibility of the customer. No suggestions for handling, storage, transportation, or use are intended as or to be construed as recommendations which may infringe on any existing patents or violate any Federal, State, and/or local law and/or regulation, ordinance, standard, etc. This Safety Data Sheet has been prepared by HASA, Inc. staff from test reports and other information available in the public domain.