

HASA AURA KLOR

Safety Data Sheet

12.5% Potassium 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 AURA KLOR	
	1.1.2	CAS # (Chemical Abstracts Service):	7778-66-7	
	1.1.3	RTECS (Registry of Toxic Effects of Chemical Substances):	Not available.	
	1.1.4	EINECS (European Inventory of Existing Commercial Substances):	231-909-2	
	1.1.5	EC Number:	231-668-3	
	1.1.6	Synonym:	Bleach, Hypo, Hypochlorite, Liquid Chlorine Solution	
	1.1.7	Chemical Name:	Potassium Hypochlorite	
	1.1.8	Chemical Formula:	KOCI	
1.2	Recommended Uses:		Potassium hypochlorite is a disinfectant used for Drinking Water (Emergency/Public/Individual) Systems, Swimming Pool Water, Sewage & Wastewater Effluent Treatment and Non-Food Contact Surfaces. It may also be used on/in Farm Premises, Cooling Towers, Agricultural (Postharvest seed or soil treatment) and Aquacultural, etc.	
1.3	Company Identification:		Hasa Inc. P. O. Box 802736 Santa Clarita, CA 91355	
1.4	Emergency Telephone Number:		CHEMTREC 1-800-424-9300 (24 hour Emergency Telephone)	
1.5	Non-Emergency Assistance:		661-259-5848 (8 AM – 5 PM PST / PDT)	

Revision Date: 01/01/2015 (Supersedes previous revisions)

SECTION 2: HAZARD(S) IDENTIFICATION			
HEALTH HAZARD	Skin corrosion / irritation:	Category 1	
	Serious Eye damage / Eye Irritation	Category 1	
	Specific target organ toxicity, single exposure	Category 3 (respiratory tract irritation)	
ENVIRONMENTAL HAZARD	Hazardous to the aquatic environment, acute hazard	Category 1	
PHYSICAL HAZARD	Corrosive to metals.	Category 1	
SYMBOLS		!	
SIGNAL WORD	DA	NGER	
HAZARD STATEMENT	in any transfer of the first terms of the first ter		
PRECAUTIONARY	Prev	vention vention	
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.		
	Res	sponse	
	If swallowed: Rinse mouth. Do NO If inhaled: Remove person to fresh breathing.	air and keep comfortable for	
		eyes: Rinse cautiously with water for	
	several minutes. Remove contact l Continue rinsing. Immediately call contaminated clothing before reuse	a poison center/doctor. Wash	
	Absorb spillage to prevent materia		
		and Disposal	
	Store in a well-ventilated place. Ke locked up. Store in corrosive resist	ant container.	
	Dispose of container/contents in a national, international regulations a		

	SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS			
Ingredient		Synonyms	CAS No.	Weight %
3.1	Potassium Hypochlorite	Bleach	7778-66-7	12.5%
3.2	Potassium Hydroxide	Caustic Potash	1310-58-3	0.2%

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.
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.
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.
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.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN

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	azards:	May decompose, generating irritating chlorine gas.
5.6	Explo	sion Hazards:	Not explosive.
5.7	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			
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	Environmental Precautions:	Do not discharge into drains, water courses or onto the ground. 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). 			

	SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION			
8.1	Engir	neering Controls:	Local exhaust ventilation to maintain levels below STEL (Short Term Exposure Limit) of 1 ppm as chlorine.	
8.2	Perso	onal Protection:		
	8.2.1	Eye / Face Protection:	Wear safety glasses, goggle prevent eye contact.	es or face shield to
	8.2.2	Skin Protection:	Wear appropriate chemical resists skin contact. Butyl rubber, N Gloves should be worn when material. Wear chemical res a rubber apron when splash immediately if skin is contant contaminated clothing promise. Clean protective equipments of the specific contaminated contaminated clothing promises.	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 misexposure limits are exceeded NIOSH approved respiratory appropriate to the material and Full facepiece equipment is used, replaces need for face goggles. For emergency and where exposure limit may be exceeded, use an approved pressure, self-contained bre	d (see below), use protection equipment and/or its components. recommended and, if e shield and chemical dother conditions e significantly full face positive-
	8.2.4	Other Safety Equipment:	Eye wash facility and emerg be in close proximity.	
8.3	Expo	sure Limits:	Potassium Hypochlorite	Chlorine*
	8.3.1	AIHA (American Industrial Hygiene Association) / WEEL (Workplace Environmental Exposure Level guides) 2010	Not established. (Short-term time weighted average data for sodium hypochlorite: 2 mg/m³: 15 minute.)	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
	8.3.8	NIOSH (15 min. ceiling)	Not established.	0.5 ppm
		orine is unlikely to be present as a dec ents of accidental mixing with other ch		be present in

	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℃ (-10°F)	
9.7	Boiling Point & Boiling Range:	Decomposes @ 110 °C (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 °C (68 °F)	
9.13	•	2.61 (air=1)	
9.14	Relative Density (Specific	1.17 g/mL or 9.75 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 °C (230 °F)	
9.19	Molecular Weight:	90.6 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: TO	XICOLOGICAL INFORMATION
11.1 Routes of Entry:		Eyes, skin, ingestion, dermal absorption.
11.2		, potassium hypochlorite behaves chemically and
	toxicologically like its sister salt of s	odium hypochlorite; all of the toxicology data were
	derived from sodium hypochlorite).	
	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	Based on the toxicity profile and exposure scenarios for
	Assessment):	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	12.1 Ecotoxicity:		Since potassium hypochlorite behaves chemically and toxicologically like its sister salt of sodium hypochlorite; all of the toxicology data requirement were waived by EPA. Moreover, according to EPA; sodium hypochlorite is low in toxicity to avian wildlife, but it is highly toxic to freshwater fish and invertebrates. All of the toxicology data were derived from sodium hypochlorite.	
	12.1.1	Freshwater Fish Toxicity:	Fat Head Minnow (pimephales promelas) $LC_{50} = 0.22 - 0.62 \text{ mg/l/96 hr}$, flow through bioassay (pH: 7)	
	12.1.2	Invertebrate Toxicity:	Water Flea (daphnia magna) $LC_{50} = 2.1 \text{ mg/l/96 hr}$ Fresh Water Shrimp (gammarus fasciatus) $LC_{50} = 0.4 \text{ mg/l/96 hr}$ 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, potassium 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	2.5 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 14: TRANSPORT INFORMATION							
14.1	Inside containers 1.3 gallons or less.						
	14.1.1	DOT Classification:	Consumer Commodity.				
	14.1.2	DOT Hazard Class:	ORM-D.				
	14.1.3 Marking: 14.1.4 Marine Pollutant:		Consumer Commodity, ORM-D.				
			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 containers 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							
14.4	Materials of Trade (MOT) Exceptions.						
	Certain hazardous materials transported in small quantities as part of a business are subject						
	to less regulation, because of the limited hazard they pose. These materials are known as Materials of Trade. The regulations that apply to MOTs are found in 49 CFR § 173.6.						
This information is not intended to convey all specific regulatory or operational requirements / information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.							

Revision Date: 01/01/2015 (Supersedes previous revisions)

SECTION 15: REGULATORY INFORMATION								
15.1	U.S. R	Regulations:						
	15.1.1	OSHA HAZCOM (Hazard Communication)			ered hazardous under the 0 CFR 1910.1200)			
	15.1.2	· · · · · · · · · · · · · · · · · · ·		SM Standard (29 CFR 1910.119)				
	15.1.3 EPA FIFRA (Federal Insecticide, EPA Reg. N		No. : 63838-10-10897 I pesticide under 40 CFR 152.10)					
	15.1.4			o): This produ	ed or exempted. uct is not subject to export			
	15.1.5	.1.5 EPA CERCLA (Comprehensive Reportable Quantit			ntity (RQ): 45.4 kg (100 lbs) or 80 gallons % active ingredient).			
	15.1.6 EPA RMP (Risk Management Plan) Not listed. (40 C		(40 CFR 68.	0 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.						
15.3		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. CDPR (California Department of Pesticide Regulation) Registration No: 63838-10-10897 CalARP (California Accidental Release Prevention Program) Regulations: WHMIS (Workplace Hazardous Materials Information System) • Classification: E (Corrosive Materials) • Health Effects Criteria Met by this Chemical: • 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)	s List) All components of the		this product are on the DSL.			
15.4	Intern	rnational Inventory:						
	15.4.1	Substances)		On inventory or in compliance with inventory.				
		KECI (Korean Existing Chemicals I		On inventory or in compliance with inventory.				
		PICCS (Philippine Inventory of Che and Chemical Substances)		On inventory or in compliance with inventory.				
	15.4.4	Substances in China)	nical	On inventory or in compliance with inventory.				
	15.4.5	NZIOC (New Zealand Inventory of Chemicals)		On invento	On inventory or in compliance with inventory.			

		SECTION 16: OTHER	INFORMATIO	N					
16.1	1 HMIS III (Hazardous Materials Identification System):								
	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	P 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	International Fire Code / International Building Code:		Irritant.						
16.4									
	16.4.1 Hazardous Industrial Chemicals - SDS-Preparation:		Complies with ANSI Z400.1 – 2004.						
	16.4.2	Hazardous Industrial Chemicals - Precautionary Labeling:	Complies with ANSI 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.