

## **Safety Data Sheet**

# **ORCA-CHLOR**

12.5 % Sodium Hypochlorite

Emergency 24 Hour Telephone: CHEMTREC 800.424.9300

Corporate Headquarters: Orca Pacific, Inc.

280 44th Street NW Auburn, WA 98001

Telephone: 253.867.0303 Fax: 253.867.5695

		OFOTION 4	IDENITIES A TION
			IDENTIFICATION
1.1	Produ	ect Identification:	
	1.1.1	Product Name:	ORCA-CHLOR
	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	<b>EINECS</b> (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:	NaOCI
1.2	Recoi	mmended Uses:	Sanitizer for swimming pool and spa water. Dairy, food and beverage industries: Sanitizing processing equipment. Water treatment.
1.3	Company Identification:		Orca Pacific, Inc. 280 44th Street NW Auburn, WA 98001
1.4	Emer	gency Telephone Number:	CHEMTREC 1-800-424-9300 (24 hour Emergency Telephone)
1.5	Non-Emergency Assistance:		253-867-0303 (8 AM – 5 PM PST / PDT)

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

SECTION 2: HAZARD(S) IDENTIFICATION				
HEALTH HAZARD	Skin corrosion / irritation	า:	Category 1	
	Serious Eye damage / Eye Irritation		Category 1	
	Specific target organ to single exposure	xicity,	irritation)	respiratory tract
ENVIRONMENTAL HAZARD	Hazardous to the aquati environment, acute haza		Category 1	
PHYSICAL HAZARD	Corrosive to metals.		Category 1	
SYMBOLS			<u>:</u>	<b>¥</b> 2
SIGNAL WORD		DAN	IGER	
HAZARD	May be corrosive to me			
STATEMENT	damage. May cause res			ric to aquatic life.
PRECAUTIONARY			ention	
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			
	If swallowed: Rinse mouth. Do NOT induce vomiting.  If inhaled: Remove person to fresh air and keep comfortable for breathing.  If on skin (or hair): Take off immediately all contaminated clothing.  Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  Continue rinsing. Immediately call a poison center/doctor. Wash			
	contaminated clothing b			Addition. Wash
	Absorb spillage to preve			ect spillage.
	Storage and Disposal			
	Store in a well-ventilated locked up. Store in corred Dispose of container/conational, international re	osive resista ntents in ac	nt container. cordance with	

	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		
4.1	IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
4.2	IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
4.3	IF INHALED	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	
4.4	IF SWALLOWED	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	
		HOT I INE NUMBER	

### **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.

	SEC	CTION 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:	<ul> <li>Avoid contact with skin or eyes.</li> <li>Do not ingest.</li> <li>Avoid inhalation of vapor or mist.</li> <li>Wear protective equipment if necessary.</li> <li>Mix only with water in accordance with label directions.</li> <li>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.</li> </ul>
7.2	Hygiene Measures:	<ul> <li>Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.</li> <li>While handling this product, avoid eating, drinking or smoking.</li> </ul>
7.3	Storage:	<ul> <li>Do not freeze.</li> <li>Store in a cool, shaded outdoor area.</li> <li>Inside storage should be in a cool, dry, well-ventilated area.</li> <li>To maintain hypochlorite strength, do not store in direct or heated indoor areas.</li> <li>Keep in original vented container.</li> <li>Keep container closed when not in use.</li> <li>Do not store adjacent to chemicals that may react if spillage occurs.</li> <li>If closed containers become heated, vent to release decomposition products (mainly oxygen under normal decomposition).</li> </ul>

3.1		neering Controls:	TROLS / PERSONAL PROTECTION  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	Eye / Face Protection:	Wear safety glasses, goggle prevent eye contact.	es 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 contant contaminated clothing promeruse. Clean protective equipments of the skin is contant.	ant gloves to prevent leoprene, or Nitrile n handling this istant clothing such a ing may occur. Rinse ninated. Remove ptly and wash before pment before reuse.	
	8.2.3	Respiratory Protection:	Avoid breathing vapor or misexposure limits are exceedededededededededededededededededed	d (see below), use protection equipment and/or its components recommended and, if e shield and chemical dother conditions e significantly full face positiveathing apparatus.	
	8.2.4	Other Safety Equipment:	Eye wash facility and emerg be in close proximity.	ency shower should	
.3	Exposure Limits:		Sodium Hypochlorite	Chlorine*	
	8.3.1	AIHA (American Industrial Hygiene Association) / WEEL (Workplace Environmental Exposure Level guides) 2010	2 mg/m³: 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	<b>ACGIH STEL</b> (Short Term Exposure Limit)	Not established.	1 ppm	
	8.3.4	<b>OSHA PEL</b> (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	Not established.	10 ppm	
		(Immediate Danger to Life & Health)			
	8.3.7	(Immediate Danger to Life & Health)  OSHA STEL (Short Term Exposure Limit)	Not established.	1 ppm as Cl <sub>2</sub>	

	SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES		
9.1	Appearance:	Greenish yellow liquid.	
9.2	Odor:	Pungent.	
9.3	Odor Threshold:	0.9 mg/m <sup>3</sup> .	
9.4	pH:	11.2 – 11.4 (1% solution)	
9.5	Melting Point:	Not pertinent.	
9.6	Freezing point:	-13.9℃ (7°F)	
9.7	<b>Boiling Point &amp; Boiling Range:</b>	Decomposes @ 110 °C (230 °F)	
9.8	Flash Point:	No information available.	
9.9	<b>Evaporation Rate:</b>	No information available.	
9.10	Flammability (solid, gas):	Not flammable.	
9.11	Upper / Lower Flammability or	No information available.	
	Explosive Limits:		
		12.1 mm Hg @ 20 °C (68 °F)	
9.13	Vapor Density:	2.61 (air=1)	
9.14	Relative Density (Specific	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 °C (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 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 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 Various Substances:	Oxidizing agents, acids, nitrogen containing organics, metals, iron, copper, nickel, cobalt, organic materials, and ammonia.	
10.5	Corrosivity:	Corrosive to metals.	
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.	

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	SECTION 11: TOXICOLOGICAL INFORMATION		
11.1	Routes of Entry:	Eyes, skin, ingestion, dermal absorption.	
11.2	Acute Toxicity:		
	11.2.1 <b>Oral Toxicity</b> (LD <sub>50</sub> ):	3-5 g/kg (rat)	
	11.2.2 <b>Dermal Toxicity</b> (LD <sub>50</sub> ):	>2 g/kg (rabbit)	
	11.2.3 <b>Primary Eye Irritation:</b>	Corrosive	
	11.2.4 <b>Primary Skin Irritation:</b>	Corrosive	
	11.2.5 Inhalation Toxicity (LC <sub>50</sub> ):	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	Ecoto	xicity:	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:	Atlantic Herring (clupea harengus) $LC_{50} = 0.033 - 0.097 \text{ mg//l/96 hr, flow through bioassay (pH: 8)} $ Shiner Perch (cymatogaster aggregata) $LC_{50} = 0.045 - 0.098 \text{ mg/l/96 hr, flow through bioassay (pH: 8)} $ Three Spine Stickleback (gasterosteus aculeatus) $LC_{50} = 0.141 - 0.193 \text{ mg/l/96 hr, flow through bioassay (pH: 8)} $ Pink Salmon (oncorhynchus gorbuscha) $LC_{50} = 0.023 - 0.052 \text{ mg/l/96 hr, flow through bioassay (pH: 8)} $ Coho Salmon (oncorhynchus kisutch) $LC_{50} = 0.026 - 0.038 \text{ mg/l/96 hr, flow through bioassay (pH: 8)} $ English Sole (parophrys vetulus) $LC_{50} = 0.044 - 0.144 \text{ mg/l/96 hr, flow through bioassay (pH: 8)} $ 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 (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	Persis	stence:	No data available.
12.3	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	Bioco	ncentration:	This material is not expected to bioconcentrate in organisms.
12.5	Biode	gradation:	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:	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 containers exceeding 1.3 gallons.					
	14.2.1	DOT Classification:	Hypochlorite Solutions.			
	14.2.2	<b>DOT Hazard Class:</b>	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	Repor	table Quantity (RQ):	100 lb (45.4 kg) or 80 gallons (based on 12.5% active ingredient)			
14.4	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 in	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,

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regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION								
15.1	U.S. R	legulations:						
	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		SM Standard (29 CFR 1910.119)			
	15.1.3	<b>EPA FIFRA</b> (Federal Insecticide, Fungicide and Rodenticide Act)	EPA Reg. No. : 10897-26 (Registered pesticide under 40					
	15.1.4		All components are listed or exempted. TSCA 12(b): This product is not subject to export notification.					
	15.1.5	<b>EPA CERCLA</b> (Comprehensive Environmental Response, Compensation, and Liability Act)	Reportable Quantity (RQ): 45.4 kg (100 lbs) or 100 gallons (based on 10% active ingredient).  Not listed. (40 CFR 68.130)					
	15.1.6				130)			
15.2	State	of California Regulations:	ı					
	15.2.1 15.2.2 15.2.3	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.  CDPR (California Department of Pesticide Regulation)  Registration No: 10897-26-ZC  CalARP (California Accidental Release Prevention  Program)						
15.3	Canac	la Regulations:						
	15.3.1	WHMIS (Workplace Hazardous Materials Information System)	<ul> <li>Classification: E (Corrosive Materials)</li> <li>Health Effects Criteria Met by this Chemical:         <ul> <li>E - Corrosive to skin</li> <li>E - TDG class 8 - corrosive substance</li> </ul> </li> <li>Ingredient Disclosure List: Included for disclosure at 1% or greater.</li> </ul>					
	15.3.2	,	All components of this p		product are on the DSL.			
15.4		ational Inventory:						
	15.4.1	Substances)		On inventory or in compliance with inventory.				
	15.4.2	, ,	<u>, , , , , , , , , , , , , , , , , </u>	On inventory or in compliance with inventory.				
	15.4.3	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	<b>NZIoC</b> (New Zealand Inventory of Chemicals)		On inventory or in compliance with inventory.				

		SECTION 16: OTHER	INFORMATIO	N					
16.1	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	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 <b>Hazardous Industrial Chemicals -</b> 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 from test reports and other information available in the public domain.