Material Safety Data Sheet

Section 1. Chemical Product and Company Identification			
Product name	Chlor 6		
Product use	Sanitizer.		
Product code	7006		
Date of issue	07/07/11	Supersedes 08/12/08	

Emergency Telephone Numbers

For MSDS Information:

Technical Services Group Telephone (780) 453-8100 (Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency

CANUTEC (24 Hours) (613) 996-6666 - Call Collect

Prepared By

Printing date: 11/07/11

Technical Services Group 11627 178th Street Edmonton, Alberta T5S 1N6

Section 2. Hazards Identification

Emergency overview

Avoid contact with eyes, skin and clothing.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects	Routes of Entry Eye contact Dermal contact. Inhalation.				
Eyes	Severely corrosive to the eyes. Causes severe burns. Direct contact with the eyes can cause irreversible damage, including blindness.				
Skin	Severely corrosive to the skin. Causes severe burns. Skin inflammation is characterized by itching, scaling, or reddening.				
Inhalation	Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath. Liquid, spray or mist may produce tissue damage, particularly to mucous membranes of eyes, mouth and respiratory tract.				
Ingestion	Harmful if swallowed. May cause burns to mouth, throat and stomach.				
Chronic effe	Cts Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes. Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Additional Information: See Toxicological Information (Section 11)				

Section 3. Composition/Information on Ingredients		
Name of Hazardous Ingredients	CAS number	% by Weight
SODIUM HYPOCHLORITE; hypochlorous acid, sodium salt; bleach	7681-52-9	5 - 10

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give

gestion Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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Flash Point

Material Safety Data Sheet Product Name Chlor 6 Section 5. Fire Fighting Measures Not applicable.

Flammable Limits	Not applicable.				
Flammability Non-flammable.					
Auto-ignition Tem	perature				
Fire-Fighting Proc	edures	Use an extinguishing agent suitable for the surrounding fire. Use flooding quantities of water. Wear special protective clothing and positive pressure, self-contained breathing apparatus.			
Fire hazard		In a fire or if heated, a pressure increase will occur and the container may burst.			
Products of Combustion		Thermal decomposition may release toxic and/or hazardous gases. carbon oxides (CO, CO ₂) Chlorine. Hydrogen chloride (HCl). Phosgene gas.			
Explosion hazard		Not available.			

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

Handling Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Do not use with other products. Apply this product only as specified on the label. Wash thoroughly after handling.

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible Storage materials (see section 10) and food and drink. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name

Sodium hypochlorite solution Cl active

Exposure limits

AIHA WEEL (United States, 1/2009). STEL: 2 mg/m³ 15 minute(s). ACGIH TLV (United States). TWA: 0.5 ppm 8 hour(s). Form: As Cl₂ STEL: 1 ppm 15 minute(s). Form: As Cl₂ **OSHA PEL 1989 (United States).** TWA: 1 ppm 8 hour(s). Form: As Cl2 STEL: 3 ppm 15 minute(s). Form: As Cl₂

Personal Protective Equipment (PPE)



Face shield. Splash goggles. Eyes Hands and Chemical-resistant apron. Neoprene gloves. Rubber gloves. Body **Respiratory** Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color Light Yellow - Green.
рН	11.5 - 12.5	Odor Bleach-like Odor
Boiling Point	102°C (215.6°F)	Vapor Pressure 3.3 kPa (25 mm Hg)
Specific Gravity	1.085	Vapor Density Not determined.
Solubility	Easily soluble in the following materials: cold water	Evaporation Rate 1 (Water = 1)
Freezing Point	and hot water.	VOC (Consumer) 0 % (w/w)

Freezing Point

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Section 10. Stability and Rea	activity					
Stability and Reactivity ncompatibility Hazardous Polymerization Hazardous Decomposition P	The product is stable. Reactive or incompatible with the f Under normal conditions of storage roducts Under normal conditions produced.	e and use, hazardous p	olymerization will no	t occur.		
Section 11. Toxicological In	formation					
Carcinogenicity Ingredients: N	lot listed as carcinogen by OSHA, N	TP or IARC.				
Acute Toxicity Sodium hypochlorite solution Cl active	LC50 Inhalation Vapor	Rat	>10.5 mg/L	0.25 hours		
	LD50 Dermal LD50 Oral	Rabbit Rat	>10000 mg/kg 8910 mg/kg	-		
Section 12. Ecological Infor	mation					
Environmental Effects Aquatic Ecotoxicity	No known significant effects or o	critical hazards.				
Product/ingredient name	Test	Result S	Species E	xposure		
Sodium hypochlorite solution Cl active	-	Acute EC50 2.3 ppm Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours		
	-	Acute EC50 1.7 ppm Fresh water	Daphnia - Water flea - Daphnia magna - 24 hours	48 hours		
	-	Acute EC50 1.57 ppm Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours		
	-	Acute EC50 0.17 ppm Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours		
	-	Acute EC50 0.04 ppm Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours		
	-	Acute LC50 5.9 mg/L Acute LC50 56400 ug/I Marine water	 Fish - Minnows Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio 	96 hours 48 hours		
	-	Acute LC50 71 ug/L Marine water	Fish - Shiner perch - Cymatogaster aggregata - Adult	96 hours		
	-	Acute LC50 70 ug/L Fresh water	Fish - Channel catfish - Ictalurus punctatus - Fingerling - 6 to 10 cm	96 hours		
	-	Acute LC50 65 ug/L Marine water	Fish - Pacific herring - Clupea pallasii - Juvenile (Fledgling, Hatchling, Weanling)	96 hours		
	-	Acute LC50 59 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 15 days - 24 mm - 98 mg	96 hours		
	-	Acute LC50 55 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours		
	-	Acute LC50 54 ug/L Marine water	Fish - Tidewater silverside - Menidia peninsulae - Juvenile (Fledgling, Hatchling, Weanling)	96 hours		
	-	Acute LC50 38 to 65 ug/L Marine water	Fish - Chinook salmon - Oncorhynchus tshawytscha - Juvenile (Fledgling, Hatchling, Weanling)	96 hours		
	-	Acute LC50 32 ug/L Marine water	Fish - Coho salmon,silver salmon - Oncorhynchus kisutch - Juvenile (Fledgling, Hatchling, Weanling)	96 hours		
	-	Acute LC50 32 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours		
	- Pago:	Acute LC50 30 to 190	Fish - Rainbow	96 hours		

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	ug/L Fresh	n water trout,donaldson trout - Oncorhynchus mykiss - 160 mm	
	- Acute LCS ug/L Fresh		96 hours
	- Acute LC3 ug/L Marin	50 23 to 52 ne water	96 hours

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream Not available.

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	Not regulated.		-	-		-
IMDG Class						-

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information

Canada

WHMIS (Canada)

Class C: Oxidizing material. Class E: Corrosive material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.