



MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet complies with the Canadian Controlled Products Act

****NOTE: THE FOLLOWING INFORMATION PROVIDED IS FOR THE PRODUCT CONCENTRATE ONLY, NOT FOR USE-DILUTIONS****

SECTION 1 – PRODUCT IDENTIFICATION					
PRODUCT IDENTIFIER:		CHLOROQLEEN			
PRODUCT USE:		Caustic Alkaline Cleaner w/Chlorinated Bleach			
SUPPLIER:		Velocity Chemicals Ltd. Unit #1, 9515- 190 th St., Surrey, B.C. V4N-3S1 Emergency Telephone: (604) 881-4700 Facsimile: (604) 881-4701		In case of transportation emergency or product spill, contact: In Canada- CANUTEC @ 613-996-6666 (24 hrs.)	
SECTION 2 – HAZARDOUS INGREDIENTS					
HAZARDOUS INGREDIENTS	% (W/W)	CAS NUMBER	LD50	LC50	EXPOSURE LIMITS
Sodium Hydroxide	5-10	1310-73-2	140-340 mg/kg (oral, rat) LDLo=500mg/kg (skin,rabbit)	Not available	OSHA(PEL) & ACGIH (TLV)= 2mg/m3(ceiling)
Sodium Hypochlorite	1-5	7681-52-9	8910 mg/kg (oral, rat) 10000 mg/kg skin, rabbit)	>10000 mg/m3 (inhal., 1 hr., rat)	ACGIH (TLV)=1ppm (STEL) as chlorine, 0.5ppm (TWA) as chlorine
SECTION 3 – PHYSICAL DATA					

<p>Physical state: liquid</p> <p>Solubility: soluble</p> <p>Odour and Appearance: clear yellow liquid w/chlorine odor</p> <p>pH (100%) @ 20°C: 13.0-14.0</p> <p>Specific Gravity @ 20°C: 1.164</p> <p>Odour Threshold (ppm): not established</p>	<p>Vapour Density: not determined</p> <p>Vapour Pressure: not determined</p> <p>Evaporation Rate: not determined</p> <p>Boiling Point (°C): not determined</p> <p>Freezing Point (°C): not determined</p> <p>Coefficient of water/oil distribution: Greater than 1</p>
--	--

CHLOROQLEEN

SECTION 4 – FIRE AND EXPLOSION DATA

<p>Flammability: No, product is non-flammable.</p> <p>If yes, under what condition: Not applicable.</p> <p>Means of Extinction: Dry chemical, alcohol foam, CO₂, water spray. The product is not flammable. Use extinguishing media suitable for surrounding fires.</p> <p>Special Fire Fighting Procedures: Wear NIOSH/OSHA approved, self contained breathing apparatus for fire fighting situations. Use water spray to cool all nearby fire exposed surfaces.</p> <p>Explosion Data-</p> <p>Sensitivity to impact: None</p> <p>Sensitivity to static discharge: None</p>	<p>Flash Point (°C) and method: not applicable</p> <p>Upper Flammable limit (% volume): not applicable</p> <p>Lower Flammable limit (% volume): not applicable</p> <p>Autoignition temperature (°C): not applicable</p> <p>Usual Fire Hazards: Prolonged contact with sensitive metals like aluminum may form flammable hydrogen gas.</p> <p>Hazardous combustion products: may liberate carbon oxides, toxic corrosive chlorine gas and other toxic organic vapours.</p>
--	---

SECTION 5 – REACTIVITY DATA

<p>Chemical Stability: yes, stable under normal storage conditions</p> <p>If no, under what conditions:</p> <p>Incompatibility with other substances: yes</p> <p>If so, under what conditions: strong acids, strong oxidizing and reducing agents. Reacts with sensitive metals such as zinc or aluminum to form flammable hydrogen gas and metals such copper, nickel, manganese, iron and its alloys will accelerate product decomposition of chlorine bleach.</p> <p>Reactivity, and under what conditions: none known</p> <p>Hazardous Decomposition Products: may form toxic, corrosive fumes of chlorine, carbon oxides upon thermal decomposition.</p>

SECTION 6 – TOXICOLOGICAL PROPERTIES

Primary route of entry: skin and eye contact, inhalation

Effects of Acute Exposure to Product: Product exposure can cause severe irritation or burns to skin and eyes. Inhaling mist or vapors can cause immediate irritation, burns or discomfort to respiratory system.

Effects of Chronic Exposure to Product: Prolonged exposure may cause skin dermatitis and respiratory disorder.

Exposure Limits: see Section 2 under Hazardous Ingredients

Irritancy of Product: corrosive to skin, eyes and respiratory system.

Sensitization: none known

Reproductive Toxicity: none known

Mutagenicity: none known

Carcinogenicity: none known

Teratogenicity: none known

Synergistic Products: none known

CHLOROQLEEN

SECTION 7 – PREVENTATIVE MEASURES

Respiratory Protection: Use a NIOSH/OSHA approved for alkaline mist/dust respirator if mists or vapors are present.

Gloves: butyl or natural rubber

Eye Protection: splash proof chemical goggles or face shield.

Footwear: rubber shoes

Clothing: long sleeve coveralls

Other: rubber apron

Engineering Controls: General ventilation for normal operating conditions or local exhaust for confined areas.

Leak and Spill Procedures: Wear protective equipment. Contain spill. Prevent runoff to drains or sewers. Recover material by vacuum or pump into a suitable waste container. Reuse material if possible, or otherwise dispose of in accordance with local regulations.

Waste Disposal: Dispose of in accordance with local environmental regulations.

Handling Procedures and Equipment: Use good hygiene practices. Avoid contact with eyes, skin and clothing. Avoid inhaling mists/vapors. Safety shower and eye wash station should be available in the immediate work area.

Storage Requirements: Store in a cool, dry place away from incompatibles. Do not mix with any other chemicals. Keep container closed when not in use. Keep from freezing and temperatures below 30°C.

Special Shipping Information:

WHMIS Classification: E

TDG Classification: Corrosive Liquid, N.O.S. (Sodium Hydroxide Mixture), Class 8, UN 1760, P.G. III

SECTION 8 – FIRST AID MEASURES

Inhalation: Remove victim to fresh air, apply artificial respiration if necessary. Seek medical help.
Ingestion: Give large amounts of water if conscious. Do not induce vomiting. Get medical help immediately.
Skin Contact: Wash thoroughly with water for 15 minutes. If irritation persists, seek medical attention.
Eye Contact: Flush immediately with water for 15-20 minutes. Seek medical help.

SECTION 9 - OTHER INFORMATION

REVISIONS: August 19, 2011

SUPERCEDES: December 14, 2007

PREPARED BY: Technical Department (Customer Service phone number: 604-881-4700)

DISCLAIMER: The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. Velocity Chemicals Ltd. expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.