

**MATERIAL SAFETY DATA SHEET**
**SECTION 1 – PRODUCT IDENTIFICATION AND USE**

PRODUCT IDENTIFIER <b>Sodium Chlorate Solution (R-8 Solution)</b>		CAS REGISTRY NO. <b>7775099</b>	
PRODUCT USE <b>Production of Chlorine dioxide for bleaching pulp. Herbicide.</b>			
MANUFACTURER'S NAME Chemtrade Pulp Chemicals LP		SUPPLIER'S NAME Chemtrade Pulp Chemicals LP	
STREET ADDRESS 2711 Pulpmill Road		STREET ADDRESS 2711 Pulpmill Road	
CITY Prince George	PROVINCE BC	CITY Prince George	PROVINCE BC
POSTAL CODE V2N 2S6	EMERGENCY TELEPHONE NO. (250) 563-4206 or CANUTEC (613) 996-6666	POSTAL CODE V2N 2S6	EMERGENCY TELEPHONE NO. (250) 563-4206 or CANUTEC (613) 996-6666

**SECTION 2- HAZARDOUS INGREDIENTS**

HAZARDOUS INGREDIENTS	gpl	CAS NUMBER	LD50 OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LC50 OF INGREDIENT (SPECIFIC SPECIES)
Sodium chlorate	620 - 680	7775-09-9	1200 mg/Kg (rat-oral)	Not available
Sodium chloride	< 20	7647-14-5	3000 mg/Kg (rat-oral)	Not available

**SECTION 3 – PHYSICAL DATA**

PHYSICAL STATE Liquid	ODOUR AND APPEARANCE Colorless, yellow or green solution, odorless		ODOUR THRESHOLD (PPM) Not available	
SPECIFIC GRAVITY 1.375 – 1.425	VAPOUR DENSITY (AIR = 1) Not available	VAPOUR PRESSURE (mm Hg) Not available	EVAPORATION RATE Not available	
BOILING POINT (°C) Not available	FREEZING POINT (°C) Not available	pH 7 - 10	COEFF. OF WATER/OIL DIST. Not available	Not Volatile

**SECTION 4 – FIRE AND EXPLOSION HAZARD**

FLAMMABILITY YES [ X ] NO [ ]	IF YES, UNDER WHAT CONDITIONS? If allowed to dry and exposed to shock conditions, explosive decomposition may occur.	
MEANS OF EXTINCTION	Sodium chlorate is not flammable but may ignite combustibles. Flood with water. Do not use fire blanket. Do not use CO <sub>2</sub> foam or dry chemical extinguishers.	
FLASHPOINT (°C) AND METHOD Not available	UPPER FLAMMABLE LIMIT (% BY VOLUME) Not available	LOWER FLAMMABLE LIMIT (% BY VOLUME) Not available
AUTOIGNITION TEMPERATURE (°C) Not available	HAZARDOUS COMBUSTION PRODUCTS Sodium perchlorate, Hydrogen chloride, Sodium oxide	
SENSITIVITY TO IMPACT Not available	SENSITIVITY TO STATIC DISCHARGE Not available	



## MATERIAL SAFETY DATA SHEET

### SECTION 5 – REACTIVITY DATA

CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IF NO, UNDER WHAT CONDITIONS?	
INCOMPATIBILITY WITH OTHER SUBSTANCES YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	IF YES, WHICH ONES?	Combustible and flammable materials, phosphorus, sulfur compounds, ammonium and metal salts, acids, metals and metal oxides.
CONDITIONS OF REACTIVITY Dry Sodium chlorate and concentrated solutions are strong oxidizers. Contact with incompatibles may cause fire and explosion.		HAZARDOUS DECOMPOSITION PRODUCTS  Chlorides, Sodium oxides

### SECTION 6 – TOXICOLOGICAL PROPERTIES

ROUTES OF ENTRY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	SKIN CONTACT	SKIN ABSORPTION	EYE CONTACT	INHALATION	INGESTION
EFFECTS OF ACUTE EXPOSURE	SKIN / EYE CONTACT : Irritation				
	INGESTION : Diarrhea, vomiting, abdominal pain, intestinal bleeding, hemolysis and death.				
EFFECTS OF CRONIC EXPOSURE	Dermatitis. Repeated exposure by inhalation or ingestion may cause toxic effects.				
EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIVITY TO PRODUCT	CARCINOGENICITY		
Not established	May cause irritation	Not established	Does not meet criteria		
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS		
Not established	Not established	Does not meet criteria	Not available		



**MATERIAL SAFETY DATA SHEET**

**SECTION 7 – PREVENTENTIVE MEASURES**

**PERSONAL PROTECTIVE EQUIPMENT**

GLOVES (SPECIFY)  Rubber gloves	RESPIRATOR (SPECIFY) As necessary. Wear SCBA when fire fighting.	EYE(SPECIFY)  Chemical safety goggles
FOOTWEAR (SPECIFY)  Rubber boots	CLOTHING (SPECIFY)  Rubber apron, coveralls	OTHER (SPECIFY) Cloth and leather clothing may be dangerously flammable if contaminated.

**ENGINEERING CONTROLS (SPECIFY)**

VENTING: Mechanical ventilation, local exhaust ventilation, exhaust directly to outside. Do not use organic or combustible materials such as wood in construction of ventilation or control systems.

**LEAK AND SPILL PROCEDURE**

Eliminate all ignition sources. Do not touch spilled material. Stop leak if it can be done without risk. Small spills – take up with sand, or other non-burnable materials and then flush area with water. Large spills – Dike for later disposal.

**WASTE DISPOSAL**

Review federal, provincial and local government requirements prior to disposal.

**HANDLING PROCEDURES AND EQUIPMENT**

Keep material away from ignition sources. Avoid generating mist. Use smallest possible amount in designated areas with adequate ventilation. Have emergency equipment readily available. Keep containers closed when not in use. Empty containers may contain hazardous residues.

**STORAGE REQUIREMENTS**

Do not store on wooden floors. Store in cool, dry, well-ventilated area, out of direct sunlight. Ship in fiberglass lined tank car and store in fiberglass lined tanks.

**SPECIAL SHIPPING INFORMATION**

Transport subject to the provisions of the TDG act and Regulations.

**SECTION 8 – FIRST AID MEASURES**

**SPECIFIC MEASURES**

EYE CONTACT:	Flush eyes with plenty of low pressure running water for at least 20 minutes. Seek medical attention if irritation persists.
SKIN CONTACT:	Remove contaminated clothing. Wash affected area with plenty of water. Seek medical attention if irritation persists.
INGESTION:	Do not induce vomiting. Have victim rinse mouth thoroughly with water. Have victim drink 8 to 10 oz. of water. Get immediate medical attention.
INHALATION:	Remove victim to fresh air or remove source of contamination. If symptoms persist, obtain immediate medical attention.

**SECTION 9 – PREPARATION INFORMATION**

DATE PREPARED September 9, 1999	LAST REVISED March 30, 2005	PREPARED BY Anna Heitman	PHONE NUMBER (250) 565-8719
------------------------------------	--------------------------------	-----------------------------	--------------------------------

**IMPORTANT:** *The technical information herein is believed to be accurate. It is offered for your consideration, investigation and verification. Buyer assumes all risk of storage, handling and use of product. NO WARRANTY, EXPRESSED OR IMPLIED, IS AMADEINCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein shall be construed as license to operate under recommendation to infringe any patents.*