



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:		GRUNT			
PRODUCT USE:		Heavy Duty Caustic Cleaner			
SUPPLIER:		<p>Velocity Chemicals Ltd. Unit #1, 9515- 190th St., Surrey, B.C. V4N-3S1 Emergency Telephone: (604) 881-4700 Facsimile: (604) 881-4701</p> <p>In case of transportation emergency or product spill, contact: In Canada- CANUTEC @ 613-996-6666 (24 hrs.)</p>			
SECTION 2 – HAZARDOUS INGREDIENTS					
HAZARDOUS INGREDIENTS	% (W/W)	CAS NUMBER	LD50	LC50	EXPOSURE LIMITS
Sodium Hydroxide	15-30	1310-73-2	140-340 mg/kg (oral, rat) LDLo=500mg/kg (skin, rabbit)	Not available	OSHA(PEL) & ACGIH (TLV)= 2mg/m3(ceiling)
1-aminopropan-2-ol	1-5	78-96-6	1715 mg/kg (oral, rat) 1640 ml/kg (skin, rabbit)	Not available	Not established
Sodium Lauryl Ether Sulfate	1-5	9004-82-4	1600 mg/kg (oral, rat)	Not available	Not established
SECTION 3 – PHYSICAL DATA					

Physical state: liquid Solubility: soluble Odour and Appearance: clear with a mild odor pH (100%) @ 20°C: 14.0 Specific Gravity @ 20°C: 1.18 Odour Threshold (ppm): not established	Vapour Density: not determined Vapour Pressure: not determined Evaporation Rate: not determined Boiling Point (°C): not determined Freezing Point (°C): not determined Coefficient of water/oil distribution: Greater than 1
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GRUNT

SECTION 4 – FIRE AND EXPLOSION DATA

Flammability: No, product is non-flammable. If yes, under what condition: Not applicable. Means of Extinction: Dry chemical, alcohol foam, CO ₂ , water spray. The product is not flammable. Use extinguishing media suitable for surrounding fires. 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. Explosion Data- Sensitivity to impact: None Sensitivity to static discharge: None	Flash Point (°C) and method: not applicable Upper Flammable limit (% volume): not applicable Lower Flammable limit (% volume): not applicable Autoignition temperature (°C): not applicable Hazardous combustion products: may liberate carbon and nitrogen oxides, and other toxic organic fumes.
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SECTION 5 – REACTIVITY DATA

Chemical Stability: yes, stable under normal storage conditions If no, under what conditions: Incompatibility with other substances: yes If so, under what conditions: strong acids and oxidizers, chlorinated hydrocarbons, and reacts with sensitive metals such as zinc or aluminum to form flammable hydrogen gas. Reactivity, and under what conditions: none known Hazardous Decomposition Products: may liberate carbon and nitrogen oxides upon thermal decomposition.

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 and 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

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, nitrile and neoprene

Eye Protection: splash proof chemical goggles or face shield

Footwear: rubber shoes

Clothing: long sleeve coveralls

Other: rubber apron

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SECTION 7 – PREVENTATIVE MEASURES (Cont.)

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. Reuse material if possible, or otherwise neutralize with soda ash before disposal. Dispose 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. 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 and 1-aminopropan-2-ol Mixture), Class 8, UN 1760, P.G. II

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 persist, seek medical attention.
Eye Contact: Flush immediately with water for 15-20 minutes. Seek medical help.

SECTION 9 - OTHER INFORMATION

REVISIONS:	October 15, 2010	SUPERCEDES:	December 14, 2007
PREPARED BY:	Technical Department (Customer Service phone number: 604-881-4700)		
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