



**MATERIAL SAFETY DATA SHEET**

ROLF C. HAGEN INC., 3225 SARTELON,  
MONTREAL, QUEBEC, H4R 1E8

**Ca #1 (A-7851)**

Section I. Product identification and uses		Section II. Hazardous ingredients	
Product name	Calcium reagent # 1	- Sodium hydroxide	8 - 15%
Chemical formula	Mixture	CAS: 1310-73-2	TLV: 2 mg/m3 ( ceiling )
Chemical family	Mixture		
Material uses	Reagent to determine calcium in water		
Section III. Physical data			
Physical state and appearance/ Odour	Clear, colourless liquid, odourless.		
pH (10%)	13 - 14		
Percent volatile	> 85%		
Freezing point	Not available		
Boiling point	Not available		
Specific gravity	1,12		
Vapour density	Not available		
Vapour pressure	Not available		
Evaporation rate	Not available		
Solubility	Soluble in water		
Section IV. Fire and explosion data			
- Flash point: Not applicable    - Flammable limits: Not applicable    - Auto-ignition temperature: Not applicable			
Section V. Reactivity data			
- Stability: Stable under normal conditions. Avoid high temperatures and contamination.			

Section VI. Toxicological properties	
<b>Routes of entry</b>	
Effects of acute exposure	Corrosive! Dangerous by ingestion, inhalation or skin absorption.
Eye	Causes severe burns. Permanent blindness may occur.
Skin	Causes severe burns if the exposed area is not washed immediately.
Inhalation	If inhaled, may cause nose and throat irritation.
Ingestion	Swallowing this material causes severe burns to the mouth, throat and stomach. Can cause death.
Effects of chronic overexposure	Corrosive effects on the skin and eyes may be delayed and damage may occur without the sensation or onset pain. To the best of our knowledge, the chemical, physical and toxicity of this substance has not been fully investigated.
Section VII First aid measures	
Eye contact	Immediately flush with copious quantities of water for a minimum of 30 minutes holding lids apart to ensure flushing of the entire surface. If irritation persists, repeat flushing. Seek immediate medical attention.
Skin contact	Remove the contaminated clothes and flush with plenty of water for a minimum of 20 minutes.
Inhalation	If inhaled, remove patient to fresh air. If symptom persists obtain medical attention.
Ingestion	Have conscious person drink several glasses of water or milk. Obtain medical attention immediately.

Section VIII. Preventive measures	
Protective clothing in case of spill and leak	Not applicable
Spill and leak	Absorb spill with inert materials such as clays, sand earth or vermiculite and place in closed container for disposal. Clean the spill area after product complete removal. DO NOT empty into drain.
Waste disposal	According to all applicable regulations.
Storage and handling	Store in cool dry area. Keep containers closed.

Section IX. Protective measures	
Protective clothing	Not applicable
Engineering controls	Not applicable

Section X. Other information	
Special precautions or comments	Before eating, drinking or smoking, wash face hands thoroughly with soap and water.

Prepared by Rolf C. Hagen Inc. (514) 332-0914	Validated January 19, 2005	MSDS A7851
---	----------------------------	------------