

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME Crest/Good Mfg. Co., Inc.		EMERGENCY TELEPHONE NO. 516-921-7260
ADDRESS (Number, Street, City, State, and ZIP Code) 325 Underhill Blvd, Syosset, NY 11791		
CHEMICAL NAME AND SYNONYMS Sodium Hydroxide, Caustic Soda		TRADE NAME AND SYNONYMS CREST ROOT DESTROYER
CHEMICAL FAMILY Alkali	FORMULA NaOH	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Sodium Hydroxide				100	

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	1390 ⁰	SPECIFIC GRAVITY (H ₂ O=1)	2.13
VAPOR PRESSURE (mm Hg.)	n.a.	PERCENT VOLATILE BY VOLUME (%)	n.a.
VAPOR DENSITY (AIR=1)	n.a.	EVAPORATION RATE (AIR=1)	n.a.
SOLUBILITY IN WATER	appreciable 347 gms/100 gms. water @ 100°C		
APPEARANCE AND ODOR	blue: no odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	none	FLAMMABLE LIMITS	
EXTINGUISHING MEDIA	n.a.	LeL	UeL
SPECIAL FIRE FIGHTING PROCEDURES	none	n.a.	n.a.
UNUSUAL FIRE AND EXPLOSION HAZARDS	contact with some metals particularly magnesium aluminum and zinc (galvanized) can rapidly generate hydrogen which is explosive		

SECTION 5 - EFFECTS OF OVEREXPOSURE

This section covers effects of overexposure for inhalation, eye/skin contact, ingestion and other types of overexposure information in the order of the most hazardous and the most likely route of overexposure.

Permissible Exposure Limits :

OSHA - 2 mg/m³ - 8-hour TWA (time-weighted average), 29CFR 1910.1000

PPG Internal Permissible Exposure Limit (IPEL) - 2 mg/m³ ceiling

ACUTE

- Eye Contact - Causes severe burns; small quantities can result in permanent damage and/o loss of vision.
- Skin Contact - Corrosive action causes burns and frequently deep ulceration with subsequent scarring. Prolonged contact destroys tissue. Dust or mist from solutions can cause irritant dermatitis.
- Ingestion - Ingestion either in solid or liquid form can cause very serious damage to the mucous membranes or other tissues with which contact is made, and may be fatal.
- Inhalation - Inhalation of dusts or mists can cause damage to the upper respiratory tract and to the lung tissue depending on severity of exposure. Effects can range from mild irritation of mucous membranes, severe pneumonitis and destruction of lung tissues.

CHRONIC

The effects of long-term, low-level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all of all effects from repetitive acute exposures.

SECTION 8 - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Use NIOSH/MSHA-approved dust/mist filter respirator for routine work purposes when exposure to mists exceed the permissible exposure limits. The respirator use limitations made by NIOSH/MSHA or the manufacturer must be observed. Respiratory protection programs must be in accordance with 29CFR 1910.134.

Ventilation (Type): Local Exhaust - sufficient to maintain dust levels below permissible exposure limit.

Eye Protection: Close fitting chemical safety goggles

Gloves: Nitrile, neoprene, natural rubber

Other Protective Equipment: Rubber boots with safety toes, rubber aprons, PVC clothing, plastic hard hat should be used when necessary to prevent skin contact. Personnel protective clothing and use of equipment must be in accordance with 29CFR 1910.133 and 29CFR 1910.132.

SECTION 9 - SPECIAL PRECAUTIONS

Precautions to be Taken During Handling and Storing:

- When handling wear close-fitting chemical safety goggles, rubber gloves, rubber boots, rubber apron, polyvinyl chloride clothing and plastic hard hat.
- Wear NIOSH/MSHA-approved, dust-type respirator, where dusts or mists may be generated.
- Store in a dry place indoors.
- Never touch eyes or face with hands or gloves that may be contaminated with Pels[®] caustic soda beads.
- Never enter a Pels[®] caustic soda storage tank or container (truck or rail car) even if it appears empty.
- Avoid contact with organic materials and concentrated acids--may cause violent reaction; caustic soda reacts with magnesium, aluminum, zinc (galvanized), tin, chromium, brass and bronze, generating hydrogen which is explosive. Also, caustic soda may react with various sugars to generate carbon monoxide.
- When making solutions, add Pels[®] caustic soda slowly to surface of cold water while stirring, to avoid violent spattering.
- Keep containers closed when not in use.

Other Precautions:

- Do not get in eyes, on skin, on clothing.
Can cause severe injury or blindness.
- Do not breathe mist.
- Do not take internally.
- Wash thoroughly after handling.
- Do not eat, drink, or smoke in work areas.

References:

1. Dangerous Properties of Industrial Materials, N. Irving Sax, Fifth Edition, 1979
2. Occupational Exposure to Sodium Hydroxide, NIOSH, 1975

COMMENTS: Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed vessels and can cause death. Follow appropriate tank entry procedures (see ANSI Z177.1 - 1977).