

MATERIAL SAFETY DATA SHEET from STEARNS PACKAGING CORPORATION

SECTION I—PRODUCT/MANUFACTURER'S IDENTITY

IDENTITY (As Used On Label and List):

Circle Cleaner Compound

SYNONYMS: ST-412, ST-414
BWCR Circle Cleaner Compound

FORMULA ID NUMBER: CQ-50

EPA REG #: None

NSF CERTIFIED: A2, 7/20/04

COMPANY: STEARNS PACKAGING CORPORATION
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HAZARD RATING		
0	Flammability	4 = Extreme
3	Health	3 = High
2	Reactivity	2 = Moderate
None	Special Hazard	1 = Slight
		0 = Insignificant

For Transportation Emergency Involving Hazardous Materials Contact: CHEM-TEL 1 (800) 255-3924

Shipping Information:

DOT SHIPPING NAME: Corrosive solids, n.o.s., 8, UN 1759, PGI (containing sodium hydroxide, solid), Item 48581, Class 55

DOT SHIPPING NUMBER: UN 1759
HAZARD LABEL: Corrosive
HAZARD CLASS: 8, Corrosive

SECTION II—HAZARDOUS INGREDIENTS OR IDENTITY INFORMATION

HAZARDOUS CHEMICAL IDENTITY &

<u>CAS#</u>	<u>HAZARD</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OTHER LIMITS</u>	<u>% (OPTIONAL)</u>
▶ Sodium hydroxide 1310-73-2	Corrosive	2	2 mg/m ³		
▶ Tetrasodium pyrophosphate 7722-88-5	Irritant	5	5		
▶ Sodium carbonate 497-19-8	Irritant				

SARA SECTION 313 TITLE III NOTIFICATION REQUIRED: No; CHEMICAL IN PRODUCT: None; CAS#: N/A; WEIGHT % OF CHEM: N/A

SECTION III—PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT:	Not Applicable	VAPOR PRESSURE (mm Hg):	Not Applicable
SPECIFIC GRAVITY (WATER=1):	Not Applicable	VAPOR DENSITY (AIR=1):	Not Applicable
MELTING POINT:	Not Determined	EVAPORATION RATE:	Not Applicable
SOLUBILITY IN WATER:	Nearly complete	pH (CONCENTRATE):	Not Determined
APPEARANCE AND ODOR:	White granules and beads caustic smell	pH (1% SOLUTION):	Not Determined

SECTION IV—FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED):	Non-combustible, >200°F
EXTINGUISHING MEDIA:	CO ₂ , water, dry chemical
FLAMMABLE LIMITS:	LEL: Not Applicable UEL: Not Applicable
SPECIAL FIRE FIGHTING PROCEDURES:	Use full protective clothing and self-contained breathing apparatus. Thermal decomposition emits toxic fumes of oxides of phosphorous.
FIRE & EXPLOSION HAZARDS:	In water solution, sodium hydroxide can react with amphoteric metals (such as aluminum) generating hydrogen which is flammable and/or explosive if ignited.

SECTION V—REACTIVITY DATA

STABILITY:	Stable
INCOMPATIBILITY (MATERIALS TO AVOID):	Water and acids. Product is strong caustic alkali. May react violently with water, acid and a number of organic compounds. Caustic reacts rapidly with aluminum, tin, and zinc (galvanized), bronze, and brass.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:	Product contains a limited amount of aluminum chips which will generate hydrogen on contact with water. The hydrogen is explosive and should be kept away from ignition sources.
CONDITIONS TO AVOID:	Product absorbs water and carbon dioxide from the air. Keep containers closed and sealed.
HAZARDOUS POLYMERIZATION:	Will not occur

SECTION VI—HEALTH HAZARD DATA/FIRST AID PROCEDURES

HEALTH HAZARDS (ACUTE AND CHRONIC): **Eyes:** May cause severe irritation with corneal injury and result in permanent impairment of vision, even blindness. Dust may irritate eyes. **Skin:** Short single exposure may cause severe skin burns. A single prolonged skin exposure is not likely to result in absorption of harmful amounts. The dermal LD50 has not been determined. **Ingestion:** Dusts or mists may cause gastrointestinal irritation or ulceration and severe burns of the mouth and throat. Single dose LD50 has not been determined. **Inhalation:** Dusts or mists may cause severe irritation or burns to upper respiratory tract.

CARCINOGENICITY: NTP: No
IARC Monographs: No
OSHA Regulated: No

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Irritation of exposed tissues. Chronic exposure causes burns. Eyes, skin, and mucous membranes may be simultaneously irritated or burned if exposed to mists of product or solutions.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Dermatitis

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Water is the only accepted method of removal of caustic soda (lye) from the eyes or skin. Flush with large amounts of cool water for 30 minutes. You may have 10 seconds or less to avoid serious permanent injury. Therefore, IMMEDIATE first aid must be given after any injurious exposure. Moving the victim from water access for transport to medical aid should be done only on the advice of medical personnel.

Skin: Immediate, continual, and thorough washing in flowing water of 30 minutes is imperative while removing contaminated clothing. Prompt medical consultation is essential. Wash contaminated clothing before reuse. Destroy contaminated shoes.

Inhalation: Remove from exposure. Obtain medical attention immediately.

Ingestion: May be harmful if swallowed. If ingested, drink large amounts of water or milk. **DO NOT** induce vomiting. Get medical attention immediately. Avoid contamination of foods.

Note to Physician: Corrosive. May cause stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. Material is strong alkali. If burn is present, treat as any thermal burn, after decontamination. For burns of skin only, irrigation may be necessary for an extended period of time to remove as much caustic as possible. Duration of irrigation and treatment is at the discretion of medical personnel. Use supportive care. No specific antidote.

SECTION VII—PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Only trained and properly protected personnel should be involved in spill cleanup operations. Acting cautiously, accidental spills of caustic soda beads must first be shoveled up. Then carefully, flush the spill area with water. Dilute acid, preferably acetic acid, may be used to neutralize only the final traces of caustic after flushing.

WASTE DISPOSAL METHOD: Waste disposal must be done in accordance with all local, city or municipality, county, state, and federal regulations. Consult your state department of natural resources or the EPA for specific questions not answerable through other sources. Wastewater should never enter a fresh water body without treatment. If material cannot be salvaged, an acceptable method of disposal is neutralization followed by discharge into treatment system with large amounts of water.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Prevent eye and skin contact. Do not breathe dusts or mists. Avoid storing next to strong acids. Caustic should be stored in clean, dry areas. Do not store in underground tanks. Product absorbs water and carbon dioxide from the air. Keep containers closed and sealed.

OTHER PRECAUTIONS: Always keep product out of the reach of children. (1) Always add beads to the liquid, never add the liquid to the beads. (2) The liquid should be lukewarm (80-100°F). Never start with hot or cold water. (3) Always sprinkle the beads slowly over the surface of constantly stirred liquid. The addition of caustic soda to liquid will cause a rise in temperature. If caustic soda becomes concentrated in one area, or is added too rapidly, or is added to hot or cold liquid, a rapid temperature increase can result in dangerous mists or boiling or spattering which may cause an immediate eruption.

SECTION VIII—OTHER REGULATORY INFORMATION

New Jersey Workplace Hazardous Substance List: Sodium hydroxide 1310-73-2

Pennsylvania Environmental Hazardous Substance List: Sodium hydroxide 1310-73-2

New York Hazardous Substances List: Sodium hydroxide 1310-73-2

Pennsylvania Right-to-Know laws: Tetrasodium pyrophosphate 7722-88-5

Massachusetts Right-to-Know law: Arsenic 7440-38-2 Cadmium 7440-43-9 Tetrasodium pyrophosphate 7722-88-5

California Safe Drinking Water and Toxic Enforcement Act of 1986: Arsenic 7440-38-2 Cadmium 7440-43-9 Lead 7439-92-1 Chromium 7440-47-3

SECTION IX—CONTROL MEASURES

RESPIRATORY PROTECTION: In general, respirators are not needed if the product is used in a well-ventilated area. However, use of a NIOSH/MSHA respirator may be a good common sense approach to working with products where dusts and mists are known to cause irritation of the eyes and/or mucous membranes.

VENTILATION: Local Exhaust: Recommended to control below TLV of 2 ppm for sodium hydroxide.

Mechanical (General): Recommended to control below TLV of 2 ppm for sodium hydroxide.

SKIN PROTECTION: Neoprene, rubber, or other chemical resistant gloves. Wear protective clothing to prevent repeated or prolonged contact.

EYE PROTECTION: Splash goggles, or safety glasses if splashing is not a concern.

WORK/HYGIENIC PRACTICES: As good hygiene dictates.

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