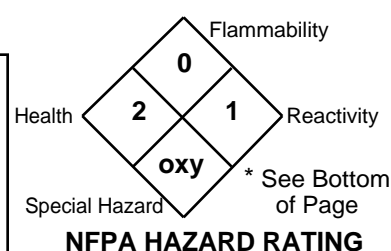


MATERIAL SAFETY DATA SHEET

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Distributed by:
Chem Source
1904 Lenore Lane
Red Wing, MN 55066



Product Name: **Halt**

EMERGENCY PHONE #: 1-800-424-9300 (CHEMTREC)

I. IDENTIFICATION

Chemical Name And Synonyms:

Sodium Hypochlorite

DOT Shipping Name

Hypochlorite Solution

Chemical Family:

Alkaline Oxidizing Agent

DOT Hazard Class & I.D. Number

Corrosive Material UN1791

#

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III

II. HAZARDOUS INGREDIENTS

Component	CAS NO.	%	TLV	PEL	Toxic	Hazard
Sodium Hypochlorite	7681-52-9	12.5	not appl.	not appl.	NA	Irritation to eyes, skin, mucous membranes.

**Toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR §372).

NA: Not applicable

III. PHYSICAL DATA

Boiling Point: 230° F.
Specific Gravity: 1.212
Appearance: Light yellow

Form: Liquid
Solubility In Water: Complete
Odor: Chlorine

pH, 1% Soln.: 11.4

IV. FIRE AND EXPLOSION HAZARD DATA

Flashpoint: Not Applicable

Extinguishing Media: Not applicable

Special Fire

Fighting Procedures: Avoid fumes from spilled or exposed liquid, dilute copiously, ventilate, and be prepared to use respiratory protection if needed. Acid contamination will produce chlorine gas which is highly toxic.

Unusual Fire And

Explosion Hazards: This product decomposes when heated to very high temperatures. Decomposition products may cause containers to rupture or explode.

V. HEALTH HAZARD DATA

Carcinogenic: The raw materials used in this product are not considered to be a carcinogen by ACGIH and OSHA.

Effects Of Over-exposure: Irritating to eyes, skin and mucous membranes.

Emergency And First

Aid Procedures:
EYES: Immediately flush with water for 15 minutes, see a physician immediately.
SKIN: Flush with water for 15 minutes. If irritation persists, get medical attention.
INGESTION: Do Not induce vomiting. Drink water or milk. Get immediate medical attention. DO NOT use baking soda or acidic antidotes.
INHALATION: Remove person to fresh air.

* NFPA Degree or Hazard: 4 = Extreme; 3 = High; 2 = Moderate; 1 = Slight; 0 = Insignificant.

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VI. REACTIVITY DATA

Stability - Unstable: Stable:

Conditions To Avoid: High temp. exposure to light, acids, contamination with heavy metals such as nickel, cobalt, copper, iron.

Incompatibility: Organics, ether, ammonia, acids, reducing agents, heavy metal contamination, nickel, cobalt, copper, iron.
(Materials To Avoid)

Hazardous

Decomposition Products: Readily reducible materials or acidic solutions, acids will react with this product liberating chlorine gas which is highly toxic.

VII. SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Contain if possible by diking. Dilute as much as possible with water. Neutralize chlorine with bisulfites, sulfites or thiosulfates. Next, neutralize to a neutral pH with dilute acid.

Waste Disposal Method: After proper neutralization, dispose of according to local, state and federal regulations. Ordinarily the neutralized substance can be flushed to drain.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: None needed unless product is exposed to decomposition conditions.

Ventilation: Adequate

Protective Gloves: Rubber or plastic

Eye Protection: Safety goggles

Protective Clothing: Use rubber apron. If spills occur, use rubber protective shoes.

IX. SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling And Storing:

Store in vented, closed, container in a dry location away from direct sunlight and not adjacent to chemical which may react with product if spillage should occur.

Other Precautions: Do not mix or contaminate with ammonia hydrocarbons, acids, alcohols, or ether. Safety showers and eye wash station should be available in storage and handling areas.

X. REVISED INFORMATION

MSDS Status:

Revised: 9/16/1997 lmt

Supersedes:

The opinions expressed herein are those of qualified experts within ANDERSON Chemical Company. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of ANDERSON Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.