



MATERIAL SAFETY DATA SHEET

SECTION 1 -- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME **Boil Out**

PRODUCT CODE 5372222

ISSUE DATE 07-01-94

MANUFACTURER Sysco Chemical
STREET ADDRESS 1390 Enclave Parkway
CITY, STATE, ZIP Houston, Texas 77077

EMERGENCY TELEPHONE NUMBERS

Medical Information: (800) 228-5635 x161

Transportation: (800) 424-9300*

*For spill, leak, fire or transport accident emergencies.

Product Information: (713) 584-1790

SECTION 2 -- COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENT

*-- (see note below)

EXPOSURE LIMITS

	CAS No.	% by wt.	OSHA PEL	ACGIH TLV	NIOSH REL
* Sodium hydroxide	1310-73-2	35	2 mg/m3 ceiling	2 mg/m3 ceiling	2 mg/m3; 15 min TWA ceiling
Sodium carbonate	497-19-8	51	None	None	None

* -- Asterisked ingredients are those considered hazardous according to the criteria of 29CFR 1910.1200.
Other ingredients are listed for informational purposes to assist emergency medical response personnel.

SECTION 3 -- HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Causes severe chemical burns.
Harmful or fatal if swallowed.
Eye contact may cause blindness.

POTENTIAL HEALTH EFFECTS

INGESTION	Corrosive and causes severe and permanent damage to mouth, throat and stomach. May be fatal if swallowed.
INHALATION	Inhalation of dust highly irritating or corrosive to mucous membranes and respiratory tract.
EYE CONTACT	Severely corrosive to the eyes, and may cause permanent damage, including blindness.
SKIN CONTACT	Corrosive; causes severe skin burns. Harmful contact may not cause immediate pain.

SECTION 4 -- FIRST AID MEASURES

INGESTION	If swallowed, DO NOT induce vomiting. Immediately drink a large quantity of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
INHALATION	If inhalation of dust occurs, remove affected person to fresh air. Call a physician if cough or other symptoms of irritation develop.
EYE CONTACT	Immediately flush eye with plenty of cool, running water. Remove contact lenses if applicable, and continue flushing for at least 15 minutes, holding eyelids apart to ensure thorough rinsing of the entire eye. Call a physician immediately.
SKIN CONTACT	Immediately flush skin with plenty of cool running water for at least 15 minutes. Wash with soap and water. If irritation develops or persists, get medical attention. Remove contaminated clothing and shoes; wash before reuse.
NOTE TO PHYSICIAN	Information pertaining to ingestion toxicology, therapy, symptomatology and treatment can be found in <u>Clinical Toxicology of Commercial Products</u> , authored by Gosselin, Smith and Hodge and published by Williams & Wilkins, Baltimore, Maryland. See listing for Lye in Therapeutics Index, Section III.

SECTION 5 -- FIRE FIGHTING MEASURES

FLASH POINT / METHOD	None / N.A.	FLAMMABLE LIMITS	Not flammable or combustible
EXTINGUISHING MEDIA	If involved in a fire, alcohol foam, carbon dioxide, dry chemical or water fog.		
SPECIAL FIRE FIGHTING PROCEDURES	Pressure demand, self-contained respiratory protection and protective clothing should be worn by fire fighters.		
FIRE AND EXPLOSION HAZARDS	Not a fire or explosion hazard. Do not mix with acidic chemicals. Solutions are very alkaline.		

SECTION 6 -- ACCIDENTAL RELEASE MEASURES

RESPONSE TO SPILLS	Small spills: Flush to sanitary sewer. Mop up residue and rinse area thoroughly with water. Large spills: Using protective clothing, retrieve spilled material and place in a suitable disposal container. Thoroughly flush affected area with water.
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SECTION 7 -- HANDLING AND STORAGE

HANDLING PRECAUTIONS	Product is a strongly alkaline material; handle with care, as for all strong chemicals. Wear protective clothing; remove contaminated clothing and wash before reuse. Wash thoroughly after handling; wash hands before eating.
STORAGE PRECAUTIONS	Store in cool, dry place. Keep away from acidic materials. Do not allow stored product to become contaminated with water or other liquids.

SECTION 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

HYGIENIC PRACTICES	Observe label precautions; use personal protective equipment. Avoid breathing dusts of this product.
ENGINEERING CONTROLS	Local exhaust ventilation is sufficient for concentrate dusts or solution fumes. Facilities using this product must be equipped with an eyewash station.

PERSONAL PROTECTIVE EQUIPMENT

	RESPIRATOR	Not normally necessary
X	GOGGLES / FACE SHIELD	Chemical splash goggles Required ; also use face shield if exposure is severe
X	APRON	Required; PVC, Neoprene or Vinyl acceptable
X	GLOVES	Required ; use PVC, Neoprene or Nitrile with long gauntlet or protective cuff
X	BOOTS	Not necessary for normal use; recommended for cleaning up large spills

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	White powder	BOILING POINT	Not applicable
ODOR	Slight detergent	FREEZING POINT	Not applicable
pH	13.0 (1% solution)	VAPOR PRESSURE	Not applicable
SPECIFIC GRAVITY	N/A	VAPOR DENSITY	Not applicable
SOLUBILITY IN WATER	Approx. 25% by weight	EVAPORATION RATE	Not applicable

SECTION 10 -- STABILITY AND REACTIVITY

CHEMICAL STABILITY		STABLE	X		UNSTABLE	
CONDITIONS TO AVOID	Do Not add to hot water. When mixing into water, add slowly to prevent spatter. Avoid contact with acidic materials, aluminum, soft metals and painted surfaces.					
INCOMPATIBILITY	Contact with strong acids produces exothermic, possibly violent reaction.					
HAZARDOUS PRODUCTS OF DECOMPOSITION	None					
POLYMERIZATION		WILL NOT OCCUR	X		MAY OCCUR	
CONDITIONS TO AVOID	Not applicable					

SECTION 11 -- TOXICOLOGICAL INFORMATION

CARCINOGENICITY

	THIS PRODUCT CONTAINS A KNOWN OR SUSPECTED CARCINOGEN
X	THIS PRODUCT DOES NOT CONTAIN ANY KNOWN OR ANTICIPATED CARCINOGENS ACCORDING TO THE CRITERIA OF THE NTP ANNUAL REPORT ON CARCINOGENS AND OSHA 29 CFR 1910, Z

OTHER EFFECTS

ACUTE	Strongly corrosive to all tissues on exposure.
CHRONIC	Not determined

SECTION 12 -- ECOLOGICAL INFORMATION

BIODEGRADABILITY		CONSIDERED BIODEGRADABLE	X		NOT BIODEGRADABLE	
BOD / COD VALUE	Not established					
ECOTOXICITY	No data available					

SECTION 13 -- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD	Small amounts of unused product may be flushed safely to the sanitary sewer with plenty of water. Contact local water board before flushing large amounts. Large amounts may be disposed of in a sanitary landfill. Contact State and local authorities for additional restrictions.					
RCRA CLASSIFICATION	Non-hazardous					
RECYCLE CONTAINER		YES		CODE		NO X

SECTION 14 -- TRANSPORT INFORMATION

DOT CLASSIFICATION		HAZARDOUS	X		NOT HAZARDOUS	
DESCRIPTION	SODIUM HYDROXIDE, SOLID, MIXTURE, 8, UN1823, II					
SYSCO HM CODE	HM 0087					

SECTION 15 -- REGULATORY INFORMATION

REGULATORY STATUS

	EPA REGISTERED (UNDER FIFRA)	
	FDA REGULATED	
X	KOSHER	
X	SARA TITLE III MATERIAL	Sodium hydroxide (Section 304)
	USDA AUTHORIZED	

SECTION 16 -- OTHER INFORMATION

NFPA CLASSIFICATION

3	BLUE	HEALTH HAZARD
0	RED	FLAMMABILITY
1	YELLOW	REACTIVITY
--	WHITE	SPECIAL HAZARD

Information contained in this MSDS refers only to the specific material designated and does not relate to any process or use involving other materials. This information is based on data believed to be reliable, and the Product is intended to be used in a manner that is customary and reasonably foreseeable. Since actual use and handling are beyond our control, no warranty, express or implied, is made and no liability is assumed by Sysco in connection with the use of this information.