

BACHARACH, INC.
MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet has been prepared to comply with the EC Directive, Canadian WHMIS and OSHA Hazard Communication Regulations.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

BACHARACH, INC.
(CHEMTREC)
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PRODUCT NAME: FLUID, ABSORBENT, FYRITE CO2

PRODUCT NUMBER: 11-0069

MSDS NUMBER: 99-0097

REVISION NUMBER: 6

MSDS DATE OF PREPARATION/REVISION: 04-10-00

SECTION 2: COMPOSITION/ INFORMATION INGREDIENTS

<u>Component</u>	<u>CAS#</u>	<u>Percentage</u>	<u>Exposure Limits</u>
Potassium Hydroxide	1310-58-3	27	2 mg/m3 TLV-Ceiling
Water	7732-18-5	73	None Established

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Red liquid with no odor. Corrosive Material. Liquid causes burns to the eyes and skin. Vapors are irritating and may be harmful. May cause narcosis and other central nervous system effects.

ACUTE HEALTH HAZARDS:

EYE CONTACT: May cause chemical burns with permanent blindness.

SKIN CONTACT: May cause chemical burns, severity depends on duration of contact.

INHALATION: May cause eye, mucous membrane and respiratory irritation. Severe overexposures may cause pulmonary edema.

INGESTION: May cause gastrointestinal corrosion, pain, nausea, vomiting, diarrhea, collapse and shock.

CHRONIC HEALTH EFFECTS: Chronic dermatitis may follow repeated contact with alkali solutions.

CARCINOGEN STATUS: None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP or OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin and respiratory conditions may be aggravated by exposure to this material.

SEE SECTION 11 - TOXICOLOGICAL INFORMATION FOR ADDITIONAL DATA

SECTION 4: FIRST AID

EYE CONTACT: Immediately flush with copious amounts of water for 20-30 minutes, lifting the upper and lower lids. Get immediate medical attention.

SKIN CONTACT: Immediately flush with water while removing any contaminated clothing. Wash thoroughly with soap and water. Get medical attention.

INHALATION: If acute overexposure occurs, remove victim to fresh air. Give artificial respiration if needed. Get immediate medical attention.

INGESTION: Do not induce vomiting. Do not give anything by mouth to a person who is unconscious or convulsing. Immediately dilute with 1-2 glasses of water or milk. Get immediate medical attention.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None **TEST METHOD:** Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

FLAMMABLE LIMITS: **LEL:** Not applicable **UEL:** Not applicable

EXTINGUISHING MEDIA: Use any media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear NIOSH approved positive pressure self contained breathing apparatus and full protective clothing for all fires involving chemicals.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This material is not combustible.

HAZARDOUS COMBUSTION PRODUCTS: Reaction with metals can liberate flammable hydrogen gas. Thermal decomposition may yield oxides of carbon and potassium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Wear recommended protective equipment. Dilute spill with water and neutralize with dilute acetic acid. Absorb with an inert absorbent and place into a chemical waste container for disposal. Do not flush to the sewer.

SECTION 7: HANDLING AND STORAGE

WORK PRACTICES: Prevent contact with the eyes, skin and clothing. When fluid is used in instrument (Fyrite), do not vent in inverted position or before the fluid has drained from the top well of the Fyrite. Hold the Fyrite away from the face when venting instrument.

SPECIAL PRECAUTIONS: Always change Fyrite fluid in the immediate vicinity of sink with running water available because of the corrosive effect of Fyrite fluid.

STORAGE: Store in a cool, dry place, separate from acid and oxidizer storage. Avoid crushing containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: General ventilation should be adequate.

RESPIRATORY PROTECTION: None required for normal use. If the exposure limit is exceeded, a NIOSH approved respirator with an organic vapor/dust/mist cartridge should be worn.

GLOVES: Rubber or other impervious gloves required when filling Fyrite or performing gas analysis.

EYE PROTECTION: Wear chemical safety goggles and face shield when filling Fyrite or performing gas analysis.

OTHER PROTECTIVE EQUIPMENT: An available source of running water for eye and skin flushing is recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Alkaline solution dyed red for visibility. No data is available.

pH: 13-14

BOILING POINT: >100°C

MELTING POINT: <0°C

SOLUBILITY IN WATER: Complete

COEFFICIENT WATER/OIL: N/A

SPECIFIC GRAVITY: >1

VAPOR PRESSURE: Not available

VAPOR DENSITY: Not applicable

PERCENT VOLATILE: 73%

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: N/A

INCOMPATIBILITY: Strong acids, aluminum, tin, zinc, chlorinated hydrocarbons, acetone.

HAZARDOUS DECOMPOSITION PRODUCTS: Reaction with metals can liberate flammable hydrogen gas. Thermal decomposition may yield oxides of carbon and potassium.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: N/A

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA: Potassium Hydroxide: LD50 oral rat: 273 mg/kg

IRRITANCY DATA: This material is corrosive to tissues.

SENSITIZATION: This material has not been tested as a whole. None of the components has been reported to cause sensitization in humans or animals.

REPRODUCTIVE TOXICITY: This material has not been tested as a whole. None of the components have reported to cause adverse reproductive effects in animals or humans.

TERATOGENICITY: This material has not been tested as a whole. None of the components have been reported to teratogenicity in animals or humans.

MUTAGENICITY: Potassium hydroxide has been reported to be mutagenic in some test systems.

SYNERGISTIC EFFECTS: There are no chemicals known to cause any additive adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION

The ecological effects of this product have not been evaluated.

SECTION 13: DISPOSAL

Dispose in accordance with all local, state, and federal regulations.

RCRA HAZARDOUS WASTE CODES: D002

SECTION 14: TRANSPORTATION DATA

US DOT SHIPPING NAME: Potassium Hydroxide Solution, 8, UN1814, PG II

DOT LABELS REQUIRED: Corrosive

EMERGENCY RESPONSE GUIDE NUMBER: 154

IATA SHIPPING NAME: Potassium Hydroxide Solution, 8, UN1814, PG II

IATA LABELS REQUIRED: Corrosive (Cargo Aircraft Only 1-30 Liters)

SECTION 15: OTHER REGULATORY INFORMATION

SARA 311/312: Hazard Categories for SARA Section 311/312 Reporting: Acute health.

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Section 313 (40 CFR 372): None

CERCLA SECTION 103 REPORTABLE QUANTITY: 3704 lbs. (Potassium Hydroxide - 1000 lbs.)

CALIFORNIA PROPOSITION 65: This product contains the following substances known to the State of California to cause Cancer and/or Reproductive Harm: None

US TOXIC SUBSTANCES CONTROL ACT: All of the components of this product are listed on the EPA TSCA Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the components of this product are listed on the Canadian Domestic Substances List.

EUROPEAN INVENTORY OF COMMERCIAL CHEMICAL SUBSTANCES: All of the components of this product are listed on the EINECS Inventory.

JAPAN MITI: All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law.

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES: All of the components of this product are listed on the AICS Inventory.

CANADIAN WHMIS CLASSIFICATION: Class E (Corrosive Material)
This product has been classified in accordance with the hazard criteria in the CPR and the MSDS contains all the information required by the CPR.

EUROPEAN COMMUNITY LABELING CLASSIFICATION: Corrosive

EUROPEAN COMMUNITY RISK AND SAFETY PHRASES: R35, S24/25, S26, S36/37/39, S45

SECTION 16: OTHER INFORMATION

NFPA HAZARD RATING: **HEALTH:** 3 **FIRE:** 0 **REACTIVITY:** 0

DATE OF LATEST MSDS REVISION: 03-14-97

REVISION SUMMARY: Format Update, Section 3, 4, 5, 8, 9, 10, 11, 15, 16

The preceding information is believed to be correct and current as of the date of preparation of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Bacharach, Inc., it is the users obligation to assure safe use of this product.