

MATERIAL SAFETY DATA SHEET

Bulldog Breaker 3XA

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Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Bulldog Breaker 3XA

Synonyms: N/A

Product Number: PRO1150

Product Use: Laundry Breaker/Booster Additive

Manufacturer/Supplier: Enviroform Industries

PO Box 6274

Lakewood, CA 90714

USA

Phone Number: 877-694-6330

Emergency Phone: 800-424-9300 CHEMTREC

Date of Preparation: Nov 3, 2011

Date of Previous Version: Mar 20-2009

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING:

MAY CAUSE EYE DAMAGE. MAY CAUSE SEVERE SKIN IRRITATION.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, skin absorption, eye contact.

Eye: May cause eye damage if not promptly treated.

Skin: May cause severe skin irritation or damage if not promptly treated.

Ingestion: Can cause damage to mucous membranes and cause stomach distress, nausea or vomiting if ingested.

Inhalation: Excessive intentional inhalation of any generated mist may cause respiratory tract damage and central nervous system effects (headache, dizziness).

Chronic Effects: Prolonged or repeated exposure can cause drying, defatting and dermatitis as well as damage skin cells.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, edema, drying, defatting, burns and cracking of the skin.

Medical Conditions Aggravated By Exposure: Certain pre-existing conditions may make workers particularly susceptible to the effects of this chemical: asthma, allergies.

Target Organs: Not available.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s) CAS # UN # Wt. %

Sodium Hydroxide	1310-73-2	5-10%
Nonionic Surfactant	proprietary	1-5%

Section 4: FIRST AID MEASURES

Eye Contact: Flush with water immediately. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

Skin Contact: After contact with skin, wash **immediately** with plenty of water. Remove and wash contaminated clothing before re-use. If irritation persists, get medical attention.

Inhalation: If inhaled, move person into fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.

Ingestion: If swallowed, call a Poison Control Center or doctor immediately. DO NOT

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induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. If swallowed, drink water to help dilute product (only if the person is conscious).

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may be delayed.

Section 5: FIRE FIGHTING MEASURES

Flammability: Not flammable by WHMIS/OSHA criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Not available.

Hazardous Combustion Products: Oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: In case of fire and/or explosion do not breathe fumes. Firefighters should wear full protective clothing including self contained breathing apparatus.

Specific Hazards Arising from the Chemical: Avoid contact with undiluted product, may cause chemical burns. May cause copious foaming.

Conditions to Avoid: Not available.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate area. Keep unnecessary personnel away.

Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.

Methods for Containment: Prevent further leakage or spillage if safe to do so. Use sand, perlite or vermiculite as an absorbent for large spills of this material.

Methods for Clean-Up: Sweep up or gather material and place in appropriate container for disposal.

Other Information: Not available.

Section 7: HANDLING AND STORAGE

Handling:

Avoid contact with eyes. Avoid contact with skin. Do not swallow. Use only in a well-ventilated area. Handle and open container with care. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

Storage:

Keep out of the reach of children. Store in a closed container away from incompatible materials. Store in a cool, dry, well-ventilated area. Keep container tightly closed. Keep away from food, drink and animal feeds.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Exposure Limits

Ingredient(s) OSHA-PEL ACGIH-TLV

N/A

Engineering Controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear safety glasses with side shields.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

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Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations:

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Thin liquid.

Color: Clear.

Odor: Salty odor.

Odor Threshold: Not available.

Physical State: Liquid.

pH: 14

Viscosity: Not available.

Freezing Point: Not available.

Boiling Point: 212 °F.

Flash Point: > 212 °F (> 100 °C)

Evaporation Rate: Negligible.

Lower Flammability Limit: Not available.

Upper Flammability Limit: Not available.

Vapor Pressure: Negligible.

Vapor Density: >1 (Air = 1)

Specific Gravity: 1.0+/-0.5

Solubility in Water: Complete.

Coefficient of Water/Oil Distribution: Not available.

Auto-ignition Temperature: Not available.

Percent Volatile, wt. %: 0.

VOC content, wt. %: 0.

Molecular Weight: Not applicable.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Conditions of Instability: None.

Conditions of Reactivity: Do not mix with other chemicals. May evolve hydrogen gas in contact with aluminum and magnesium.

Incompatible Materials: Acids. Oxidizers.

Hazardous Decomposition Products: Oxides of carbon.

Possibility of Hazardous Reactions: In contact with acids, oxidizers, or soft metals (Al, Mg).

Spontaneous Polymerization: Will not occur.

Conditions to Avoid: Not available.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient(s) IDLH LD₅₀ (oral) LC₅₀

Sodium Hydroxide, 273 mg/kg, oral, rat

Draize test, rabbit, skin: 50mg/24H, severe

Eye: Can cause burns and damage to eyes. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: May cause severe skin inflammation or chemical burns. Symptoms may include redness, edema, drying, defatting, burns, and cracking of the skin.

Ingestion: Not a normal route of exposure. May cause stomach distress, nausea or Vomiting and burns to esophagus or other mucous membranes.

Inhalation: Not a normal route of exposure. May cause respiratory tract irritation and burns.

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EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS/OSHA criteria.

Carcinogenicity: Not hazardous by WHMIS/OSHA criteria.

Ingredient(s) Chemical Listed as Carcinogen or Potential Carcinogen *

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS/OSHA criteria.

Reproductive Effects: Not hazardous by WHMIS/OSHA criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS/OSHA criteria.

Embryotoxicity: Not hazardous by WHMIS/OSHA criteria.

Respiratory Sensitization: Not hazardous by WHMIS/OSHA criteria.

Skin Sensitization: Not hazardous by WHMIS/OSHA criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: This product is not expected to produce significant eco-toxicity upon exposure to aquatic organisms and aquatic systems. Ingredients are expected to be >60-90% decomposed within 28 days.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material and its container must be disposed of in a safe way. Dispose in accordance with all applicable regulations.

Section 14: TRANSPORTATION INFORMATION

United States (DOT)

Sodium Hydroxide Solutions, 8, PGII, UN 1824, Corrosive

Canada (TDG)

N/A

Mexico (NOM-004-SCT2-1994)

N/A

Section 15: REGULATORY INFORMATION

Federal Regulations

US: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico: MSDS prepared pursuant to NOM-018-STPS-2000.

SARA Title III

Ingredient(s) Section 302

(EHS) TPQ (lbs.)

Section 304

EHS RQ (lbs.)

CERCLA

RQ (lbs.)

Section 313

None.

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State Regulations

California Proposition 65:

This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories

Ingredient(s) Canada

DSL/NDSL

USA

TSCA

None

NFPA - National Fire Protection Association:

Health - 2 Fire - 0 Reactivity - 1

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

Class E - Corrosive

WHMIS Hazard Symbols:

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

3 - None.

Section 16: OTHER INFORMATION

Disclaimer:

The information and data contained herein is based upon facts considered to be correct as of the date hereof. Information is supplied upon the condition that the persons receiving will make their own determination as to its suitability for their purposes prior to use. In no event will Enviroform Industries be responsible for damages of any nature whatsoever resulting from the use or reliance upon this information. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which this information refers.

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