

SAFETY DATA SHEET

Laundry Break Laundry Detergent Booster

EM SYSTEMS INC.

Revision Date: November 7, 2014

SECTION 1: IDENTIFICATION

Product Identifier:

Product Name: Laundry Break

Recommended Use of the Chemical and Restrictions on Use

Recommended Use: Laundry, product

Details of the Supplier of the Safety Data Sheet

Supplier Address: E.M. Systems, Inc. 1931 West 2425 South Woods Cross, UT 84087

Emergency Telephone Number

Company Phone Number: 801-292-8051

Emergency Telephone: CHEMTREC: 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification:

Skin corrosion	Category 1
Serious eye damage	Category 1
Eye Irritation	Category 1

GHS Label element:

Signal Word: Danger

Symbol:



Hazard statements: Causes severe skin burns and eye damage.

Precautionary Statements:

Prevention: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wash hands thoroughly after handling.

Response: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician.
IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage: No other specific measures identified.

Disposal: See section 13 for waste disposal information

Other Hazards: None Known.

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SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients:

Product AS SOLD, Pure substance or Mixture: <u>Mixture</u>		
Chemical Name	CAS No	Concentration-%
Sodium Hydroxide	1310-73-2	28%
Tetrasodium EDTA	64-02-8	5-20%

SECTION 4: FIRST AID MEASURES

Product AS SOLD:

Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Skin contact:	Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Swallowed:	Get medical attention immediately. Rinse mouth. Do not induce vomiting.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Notes to physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled..

Product AT USE DILUTION:

Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Skin contact:	Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Swallowed:	Get medical attention immediately. Rinse mouth. Do not induce vomiting.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.

See toxicology information (Section 11)

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SECTION 5: FIRE-FIGHTING MEASURES

Suitable fire extinguishing

Media: Use water spray, fog or foam.

Specific hazards arising

From the chemical: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal

Decomposition products: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides

Specific fire-fighting

Methods: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective

equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

	Product: AS SOLD	Product: AT USE, DILUTION
Personal Precautions	Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.	Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.
Environmental Precautions	Avoid contact of spilled material and runoff with soil and surface waterways.	Avoid contact of spilled material and runoff with soil and surface waterways.
Methods for Cleaning up	Follow company's spill procedures. Keep people away from spill. Put on appropriate personal protective equipment (see section 8). Absorb/neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Use a water rinse for final clean-up.	Follow company's spill procedures. Keep people away from spill. Put on appropriate personal protective equipment (see section 8). Absorb/neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Use a water rinse for final clean-up.

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SECTION 7: HANDLING AND STORAGE

	Product: AS SOLD	Product: AT USE, DILUTION
Handling	Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Wash thoroughly after handling.	Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Wash thoroughly after handling.
Storage	Keep out of reach of children. Keep container tightly closed. Store between the following temperatures: 0 and 50°C	Keep out of reach of children. Keep container tightly closed.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

Ingredient Name:	Exposure Limits
Sodium Hydroxide	ACGIH TLV (United States, 3/2012). C: 2 mg/m ³ OSHA PEL (United States, 6/2010). TWA: 2 mg/m ³ 8 hours. NIOSH REL (United States, 6/2009). CEIL: 2 mg/m ³

	Product: AS SOLD	Product: AT USE, DILUTION
Appropriate engineering controls	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Personal Protection:

Eye Protection: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.

Hand protection: Use chemical-resistant, impervious gloves.

Skin protection: Use synthetic apron, or protective equip. as necessary to prevent skin contact.

Respiratory Protection: A respirator is not needed under normal and intended conditions of product use.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Odor: Odorless
Color: White to yellowish (light)	pH: 14, 100%
Flash point: >100°C	Boiling point: >100°C (>212°F)
Odor Threshold: No data available	Melting point/freezing point: No data available
Initial boiling point: No data available	Evaporation rate: any data available
Flammability (solid, gas) : No data available	Upper explosion limit : No data available
Lower explosion limit : No data available	Vapor pressure : No data available
Relative vapor density: No data available	Relative density: 1.22 (Water =1)
Solubility: Easily soluble in the following materials: cold water and hot water.	Partition coefficient: No data available
Solubility in other solvents: No data available	Thermal decomposition : No data available
Autoignition temperature : No data available	VOC : No data available
Viscosity, kinematic : No data available	Oxidizing properties : No data available
Explosive properties : No data available	
Molecular weight : No data available	

SECTION 10: STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	None known.
Materials to avoid:	Slightly reactive or incompatible with the following materials: organic materials, metals, acids, alkalis and moisture.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information: Potential Health Effects

Inhalation:	Avoid inhalation of vapors, or mist, may cause nose, throat, and lung irritation.
Eye Contact:	Causes serious eye damage.
Skin Contact:	Causes severe skin burns.
Ingestion:	Do not taste or swallow. Causes digestive tract burns.

Product Information: Experience with human exposure.

Eye contact:	Redness, Pain, Corrosion
Skin contact:	Redness, Pain, Corrosion
Ingestion:	Corrosion, Abdominal pain
Inhalation:	Respiratory irritation, Cough

Toxicity data:

Product/ingredient name:	Not applicable
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Chronic toxicity:

Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards
Teratogenicity:	No known significant effects or critical hazards
Developmental effects:	No known significant effects or critical hazards
Fertility effects:	No known significant effects or critical hazards

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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: This material is harmful to aquatic life.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
Sodium hydroxide	Acute EC50 40 mg/l	Daphnia	48 Hours

Other Adverse effects: No known significant effects or critical hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

RCRA Classification: Unused product is D002 (Corrosive)

SECTION 14: TRANSPORT INFORMATION

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Land transport (DOT)

UN number: 1824
Description of the goods: Sodium hydroxide, Mixture
Class: 8
Packing group: II
Environmentally hazardous: No

Sea transport (IMDG/IMO)

UN number: 1824
Description of the goods: Sodium hydroxide, Mixture
Class: 8
Packing group: II
Marine pollutant: No

SECTION 15: REGULATORY INFORMATION

U.S. Federal regulations

TSCA 8(b) inventory: All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No listed substance

SARA 302/304 emergency planning and notification: No listed substance

SARA 313	Product name	CAS number	Concentration
Form R – Reporting requirements	No listed substance	-	-
California Prop. 65	No listed substance	-	-

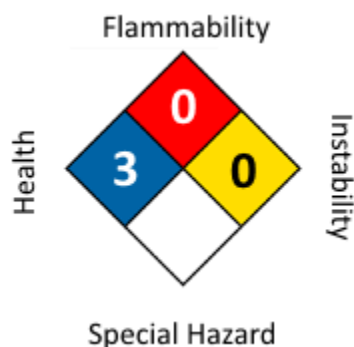
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SECTION 16: OTHER INFORMATION



HMIS III:	
HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic	

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of publication. The information is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet