Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 07/14/2017

SECTION 4. Identification	
SECTION 1: Identification	
1.1. Identification	
Product form : Mixture Product name : BR-BA BREAK AWAY HIGH ph PRESOAK	
Product code : BR-BA5, BA30, BA55	
1.2. Recommended use and restrictions on use No additional information available	
1.3. Supplier BROTHERS RESEARCH CORPORATION	
2245 Air Park Drive	
Burlington, NC 27215	
T 800-638-7245	
1.4. Emergency telephone number Emergency number : 800-424-9300	
Lineigency humber . 800-424-9300	
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or mixture	
GHS-US classification	
Skin corrosion/irritation H314 Causes severe skin burns and eye damage	
Category 1A	
Full text of H statements : see section 16	
2.2. GHS Label elements, including precautionary statements	
GHS-US labeling	
Hazard pictograms (GHS-US) :	
Signal word (GHS-US) : Danger	
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage	
Precautionary statements (GHS-US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray	
P264 - Wash thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection	
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting	
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing	Rinse
skin with water/shower P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathin	a
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remov	
lenses, if present and easy to do. Continue rinsing P310 - Immediately call a poison center/doctor/	
P321 - Specific treatment (see on this label)	
P363 - Wash contaminated clothing before reuse	
P405 - Store locked up P501 - Dispose of contents/container to	
2.3. Other hazards which do not result in classification	
No additional information available	
2.4. Unknown acute toxicity (GHS US)	
Not applicable	
SECTION 3: Composition/Information on ingredients	
3.1. Substances	
Not applicable	
3.2. Mixtures	

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Name	Product identifier	%	GHS-US classification
sodium hydroxide, 0.5%= <conc<2.0%, aqueous="" solutions<="" td=""><td>(CAS No) 1310-73-2</td><td>1 - 6</td><td>Skin Corr. 1A, H314</td></conc<2.0%,>	(CAS No) 1310-73-2	1 - 6	Skin Corr. 1A, H314
tetrasodium ethylenediaminetetracetate	(CAS No) 64-02-8	1 - 4	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. If not breathing give artificial respiration. Get medical advice/attention. Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove clothing while washing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
First-aid measures after eye contact	: Move victim away from exposure and into fresh air. Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell.
4.2. Most important symptoms and effect	ts (acute and delayed)
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Immediate medical attention and sp	ecial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguish	ing media
Suitable extinguishing media	: Carbon dioxide. Dry chemical powder. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Specific hazards arising from the ch	nemical
Fire hazard	: Not flammable. Non combustible.
Explosion hazard	: TO BE COMPLETED
Reactivity	: TO BE COMPLETED
5.3. Special protective equipment and p	recautions for fire-fighters
Firefighting instructions	: Water can be used to keep exposed containers cool, to protect. Wear normal protective equipment (full bunker gear) and possitive-pressure self contained breathing appartus. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release meas	sures
6.1. Personal precautions, protective eq	uipment and emergency procedures
General measures	: Absorb spill on vermiculite floor absorbent or other absorbent material.

Protective equipment	: Protective clothing. Protective goggles.
Emergency procedures	: If runoff ocurrs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, material to containers for disposal. Close container tightly and dispose of properly. Evacuate unnecessary personnel.

6.1.1. For non-emergency personnel

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6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment. Notify auth authorities if liquid enters sewers or public wa	orities if product enters sewers or public waters. Prevent entry to sewers and public waters. Notify ters.
6.3. Methods and material for contain	ment and cleaning up
For containment	: Transfer contaminated absorbent, soil and othe material to containers for disposal. Close container tightly and dispose of properly.
Methods for cleaning up	: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
See Heading 8. Exposure controls and person	nal protection. For further information refer to section 13.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	Ensure good ventilation of the work station. Wear personal protective equipment. Containers may be hazardous when emptied. Since emptied containers retain product residues, all hazard precautions given in the data sheet should be observed. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, inclu	Iding any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep away from heat, sparks, and flames. Emptied containers may retain product residues. Precautions apply to emptied containers. Keep only in the original container in a cool, well ventilated place away from : Keep away from heat, sparks, and flames, Keep container tightly closed, Store in a well-ventilated place. Keep container closed when not in use. Keep cool.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.

SECTIO	ON 8: Exposure c	ontrols/personal protection		
8.1.	Control parameters			
sodium	n hydroxide, 0.5%= <co< th=""><th>onc<2.0%, aqueous solutions (1310-73-</th><th>2)</th><th></th></co<>	onc<2.0%, aqueous solutions (1310-73-	2)	
ACGIH		ACGIH Ceiling (mg/m ³)	2 mg/m ³	
tetraso	tetrasodium ethylenediaminetetracetate (64-02-8)			
Not app	olicable			

8.2.	Appropriate engineering controls	
	ate engineering controls ental exposure controls	Ensure good ventilation of the work station.Avoid release to the environment.
8.3.	Individual protection measures/Pers	sonal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or safety glasses. Safety glasses

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Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical	
9.1. Information on basic physical and Physical state	
•	: Liquid
Appearance Color	: Blue Liquid. : Blue
Odor	: Solvent
Odor threshold	: No data available
pH	: 11 - 12
Melting point	: No Data
Freezing point	: No data available
Boiling point	: 212 °F
Flash point	: > 200 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	:140 @ 130.0 F
Relative vapor density at 20 °C	: No data available
Relative density	: H20= <1
Solubility	: Soluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: >= 95 cP
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivit	·V
10.1. Reactivity	
TO BE COMPLETED	
10.2. Chemical stability	
Stable under normal conditions. Not establishe	ed.
10.3. Possibility of hazardous reactions	3

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

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ECTION 11: Toxicological informat	
1.1. Information on toxicological effects	
Acute toxicity	: Not classified
tetrasodium ethylenediaminetetracetate (64-	02-8)
LD50 oral rat	> 2000 mg/kg (Rat)
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
	pH: 11 - 12
Serious eye damage/irritation	: Not classified
	pH: 11 - 12
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
sodium hydroxide, 0.5%= <conc<2.0%, aque<="" td=""><td></td></conc<2.0%,>	
LC50 fish 1	189 mg/l (Leuciscus idus; Pure substance)
LC50 other aquatic organisms 1	100 mg/l (48 h; Daphnia magna; Pure substance)
TLM fish 1	125 ppm (96 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	100 mg/l (48 h; Daphnia magna; Pure substance)
tetrasodium ethylenediaminetetracetate (64-	02-8)
LC50 fish 1	121 mg/l (96 h; Lepomis macrochirus; Soft water)
EC50 Daphnia 1	625 mg/l (24 h; Daphnia magna)
LC50 fish 2	374 - 792 mg/l (96 h; Lepomis macrochirus; pH > 7)
Threshold limit algae 1	> 100 mg/l (72 h; Scenedesmus subspicatus; Growth)

BR-BA BREAK AWAY HIGH PN PRESOAK	
Persistence and degradability	Not established.
sodium hydroxide, 0.5%= <conc<2.0%, aqueo<="" td=""><td>us solutions (1310-73-2)</td></conc<2.0%,>	us solutions (1310-73-2)
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
tetrasodium ethylenediaminetetracetate (64-0	2-8)
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	< 0.002 g O₂/g substance
Chemical oxygen demand (COD)	0.54 - 0.58 g O₂/g substance

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12.3. Bioaccumulative potential	
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Bioaccumulative potential	Not established.
sodium hydroxide, 0.5%= <conc<2.0%, aqueo<="" td=""><td></td></conc<2.0%,>	
Bioaccumulative potential	Not bioaccumulative.
tetrasodium ethylenediaminetetracetate (64-	
Log Pow Bioaccumulative potential	-2.6 Bioaccumulation: not applicable.
12.4. Mobility in soil No additional information available	
12.5. Other adverse effects	
Effect on the global warming	: No known effects from this product.
GWPmix comment	: No known effects from this product.
Other information	: Avoid release to the environment.
SECTION 13: Disposal consideration	S
13.1. Disposal methods	
Product/Packaging disposal recommendations Ecology - waste materials	Dispose in a safe manner in accordance with local/national regulations.Avoid release to the environment.
SECTION 14: Transport information	
Department of Transportation (DOT) In accordance with DOT	
Not applicable	
TDG	
Not applicable	
Transport by sea	
Not applicable	
Air transport	
Not applicable	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
BR-BA BREAK AWAY HIGH ph PRESOAK	
Not listed on the United States TSCA (Toxic Sul	bstances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations No additional information available

National regulations No additional information available

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15.3. US State regulations

No additional information available

: None.
ses severe skin burns and eye damage
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SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product