SAFETY DATA SHEET
Improve Liquid Break

Printed: 07/17/2015
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1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: MORGAN-107-BULK
Product Name: Improve Liquid Break

Company Name: Morgan-Gallacher, Inc.
8707 Millergrove Drive
Santa Fe Springs, CA 90670
Phone Number: +1 (562)695-1232

Emergency Contact: CHEMTREC +1 (800)424-9300

2. HAZARDS IDENTIFICATION

Skin Corrosion/Irritation, Category 1A
Acute Toxicity: Oral, Category 4
Serious Eye Damage/Eye Irritation, Category 2A
Corrosive To Metals, Category 1

GHS Signal Word: **Danger**

GHS Hazard Phrases:
H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.

GHS Precaution Phrases:
P102 - Keep out of reach of children.
P103 - Read label before use.
P262 - Do not get in eyes, on skin, or on clothing.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Take any precaution to avoid mixing with Acid Products

GHS Response Phrases:
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes.
P315 - Get immediate medical advice/attention.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342 - If experiencing respiratory symptoms: P315 - Get immediate medical advice/attention.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P315 - Get immediate medical advice/attention.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P315 - Get immediate medical advice/attention.

GHS Storage and Disposal Phrases:
P405 - Store locked up.
P501 - Dispose of contents/container in accordance to local, state and federal regulations.

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):

Inhalation: Inhalation may cause irritation, coughing, sore throat, and in extreme cases, pulmonary edema. Inhalation of vapors may cause drowsiness and dizziness.

Skin Contact: May cause severe burns with delayed tissue destruction. May cause skin irritation. Causes redness and pain.

Eye Contact: May cause eye irritation. Causes severe eye burns. May cause irreversible eye injury. Causes redness and pain.

Ingestion: May cause severe and permanent damage to the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-58-3	Potassium hydroxide	>15.0 %
7320-34-5	TKPP	<10.0 %
64-02-8	Ethylenediamine tetraacetic acid, tetrasodium salt	< 5.0 %
7758-29-4	STPP	<10.0 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures: Remove from exposure and move to fresh air immediately.

In Case of Inhalation: Remove from exposure and move to fresh air immediately. Get medical aid immediately. Do NOT use mouth-to-mouth resuscitation.

In Case of Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

In Case of Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical aid immediately.

In Case of Ingestion: Never give anything by mouth to an unconscious person. IF SWALLOWED: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention immediately.

Note to Physician: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash Pt: NA

Explosive Limits: LEL: None UEL: None

Autoignition Pt: NA

Suitable Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Do NOT use straight streams of water.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Toxic fumes may be emitted under fire conditions.

Flammable Properties and Hazards: No data available.

Hazardous Combustion Products: No data available.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: Use proper personal protective equipment as indicated in Section 8.

Steps To Be Taken In Case Material Is Released Or Spilled: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Do not let product enter drains. Discharge into the environment must be avoided.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Wash thoroughly after handling. Use only in a well ventilated area. Keep container tightly closed. Keep away from heat, sparks and flame.

Precautions To Be Taken in Storing: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1310-58-3	Potassium hydroxide	PEL: 2.0 mg/m3	CEIL: 2 mg/m3	No data.
7320-34-5	TKPP	No data.	No data.	No data.
64-02-8	Ethylenediamine tetraacetic acid, tetrasodium salt	No data.	No data.	No data.
7758-29-4	STPP	No data.	No data.	No data.

Respiratory Equipment (Specify Type): If vapor concentration exceeds ACGIH-TLV or OSHA-PEL, use NIOSH/MSHA approved respirator with an organic vapor cartridge.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Purple. Transparent.
pH:	NA12
Melting Point:	NP
Boiling Point:	NA
Flash Pt:	NA
Evaporation Rate:	NA
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: None UEL: None
Vapor Pressure (vs. Air or mm Hg):	NA
Vapor Density (vs. Air = 1):	NA
Specific Gravity (Water = 1):	1.291 - 1.311
Solubility in Water:	100%
Saturated Vapor Concentration:	NA
Octanol/Water Partition Coefficient:	No data.
Percent Volatile:	N.A.
Autoignition Pt:	NA
Decomposition Temperature:	NA
Viscosity:	NA

10. STABILITY AND REACTIVITY

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	Avoid extremely high temperature. Direct sunlight.
Incompatibility - Materials To Avoid:	Acids, Strong oxidizing agents. Contact of this product with many "active" metals such as aluminum, tin, copper, zinc, and most alloys can cause formation of flammable hydrogen gas.
Hazardous Decomposition or Byproducts:	Hazardous decomposition products formed under fire conditions: Toxic fumes of sodium oxide, hydrogen gas, oxides of potassium.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information:

Epidemiology: No data available.
Reproductive Effects: No data available.
Mutagenicity: No data available.
Neurotoxicity: No information found.
Teratogenicity: No information available.

Irritation or Corrosion:

Other Studies: CAS# 1310-58-3:
Acute toxicity, LD50, Oral, Rat, 273 mg/kg

Other Studies: CAS# 1310-58-3:
Standard Draize Test, Skin, Species: Rabbit, 50.0 mg, 24H

Other Studies: CAS# 7320-34-5
Acute toxicity, LD50, Dermal, Rabbit: 4640 mg/kg
Acute toxicity, LD50, Oral, Rat: 2444 mg/kg

Other Studies: PhosphateCAS# 7758-29-4:
Acute toxicity, LD50, Oral, Rat, 3120 mg/kg

Carcinogenicity/Other Information:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity:

NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

CAS# 7320-34-5: TKPP: LC50, Medaka, High-Eyes (Oryzias latipes), 590000. , 24 H.

Results of PBT and vPvB assessment:

Other Studies: CAS# 1310-58-3:
LC50, Western Mosquitofish (Gambina affinis), adult(s), 80000 ug/L, 96H, Mortality

Other Studies: CAS# 7320-34-5:
LC50, Zebra mussel (Dreissna polymorpha), adult(s), 94000 ug/L, 96H, Mortality

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of contents/containers in accordance with local / regional / national / international regulations.
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Potassium hydroxide, solution.
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN1814 **Packing Group:** II

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1310-58-3	Potassium hydroxide	No	Yes 1000 LB	No
7320-34-5	TKPP	No	No	No
64-02-8	Ethylenediamine tetraacetic acid, tetrasodium salt	No	No	No
7758-29-4	STPP	No	Yes 5000 LB	No

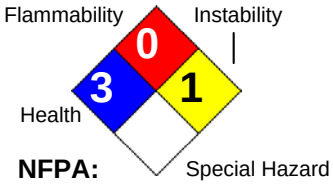
CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
1310-58-3	Potassium hydroxide	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: Yes - 1571; NY Part 597: Yes; PA HSL: Yes - E
7320-34-5	TKPP	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
64-02-8	Ethylenediamine tetraacetic acid, tetrasodium salt	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
7758-29-4	STPP	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: No; NY Part 597: Yes; PA HSL: Yes - E

Regulatory Information Statement: No known hazardous materials as defined by OSHA 29 CFR 1910.1200.

16. OTHER INFORMATION

Revision Date: 07/17/2015

Hazard Rating System:



NFPA:

Additional Information About This Product: Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chlorides

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