

# Special Liquid Caustic

## High-Caustic Non-Foaming Detergent

A low-foam, heavy-duty liquid alkaline detergent recommended for circulation (C.I.P.), pressure washing, boil-out, soak cleaning. Recommended for use in canneries, beverage plants, dairies, breweries, smokehouses, brine cabinets, HTST systems, and other applications which require heavy-duty cleaning. This product's high-alkalinity cuts through the heaviest soils and its built-in descalants prevent any alkaline films from forming.

- **Built-In Rinsing & Descaling Prevents Alkaline Films from Forming**
- **Ultra-High Alkalinity**
- **Cuts Through Heavy Grease, Protein & Carbon**
- **Non-Foaming**

**Usage Directions:** C.I.P. Applications: Flush system with water. Prepare a solution in accordance with Dilution Guidelines chart. Circulate through the system until soils are loosened and/or removed as determined by inspection. Drain system and rinse thoroughly with potable water. Follow with sanitizer.

**Pressure Washing:** Apply solution to soiled surfaces; scrub or hand detail with a nylon pad or brush if necessary. Rinse thoroughly with potable water.

**Boil-Out and Soak Operations:** Heat solution and allow to soak until soils are loosened and/or removed as determined by inspection. Scrub or hand detail with a nylon pad or brush if necessary. Drain system and rinse thoroughly with potable water.

**Fog cleaning for ovens and smokehouses:** Warm smokehouse or oven to approximately 100°F(38°C) to 120°F(49°C). Apply product to all internal surfaces of the oven or smokehouse through an appropriate fogging system. Use the equipment's internal air handling system to circulate the atomized detergent. Allow atomized product to settle or dissipate prior to opening the oven or smokehouse. Thoroughly rinse all surfaces with potable water using high-pressure system.

### Safety & Hazards



Wear Protective Eye Glasses, Chemical-Resistant Gloves and Waterproof Apron While Using Special Liquid Caustic

#### Consult SDS for Further Safety Precautions

**DOT Shipping Name:** UN 1824, Sodium Hydroxide Solution, 8, PG II

### Technical Information:

Appearance: Clear, Light Brown Liquid  
Odor:  
pH: >13.0  
Foam: Non-Foaming

### Associated Products:

Acidisol, Acid Sanitizer  
MG Peracid 6, 5.6% Peroxyacetic Acid Sanitizer  
Multi-Chlor, 12.5% Sodium Hypochlorite Sanitizer

### Special Liquid Caustic

#### Dilution Guidelines

Usage	Dilution
General CIP Cleaning	1/3 - 4 Ounces per Gallon
Pressure Washing	1 - 6 Ounces per Gallon
Boil-Out & Soak Operations	2 - 8 Ounces per Gallon
Fogging / Atomizing	6 - 10 Ounces Per Gallon

#### Titration Kit:

MRTK3000-Z, High-Alkalinity / Caustic Titration. 1 Drop = 0.174 oz per gallon

**Warning: Do Not Mix With Acidic Products. May Damage Painted Surfaces, Aluminum, Brass, Copper, Galvanized And/Or Other Soft Metals.**

Products Manufactured By:



8707 Millergrove Drive - Santa Fe Springs, CA 90670  
(562) 695-1232 - FAX: (562) 699-8953

# Product Selection and General Use Chart

# Special Liquid Caustic

## General Use: High-Caustic Non-Foaming Detergent

A low-foam, heavy-duty liquid alkaline detergent recommended for circulation (C.I.P.), pressure washing, boil-out, soak cleaning. Recommended for use in canneries, beverage plants, dairies, breweries, smokehouses, brine cabinets, HTST systems, and other applications which require heavy-duty cleaning. This product's high-alkalinity cuts through the heaviest soils and its built-in descalants prevent any alkaline films from forming.

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## Safety & Hazards



**Danger: Keep out of reach of children. Read label before use. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Take any precaution to avoid mixing with acid products. May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage.**

**Product Class: Caustic**

## Protective Equipment Guide

A			
B			
C			
D			
E			
F			
G			
H			
I			
J			
K			
X	Ask Your Supervisor for Special Handling Instructions		

**Wear Protective Eye Glasses, Chemical-Resistant Gloves and Waterproof Apron While Using Special Liquid Caustic**

**Attention: Do Not Mix With Acidic Products. May Damage Painted Surfaces, Aluminum, Brass, Copper, Galvanized And/Or Other Soft Metals.**

Products Manufactured By:

# Letter of Guarantee

# Special Liquid Caustic

Morgan-Gallacher, Inc. guarantees the product Special Liquid Caustic complies with the requirements set forth by the USDA FSIS for Nonfood Compounds Category Code A1: Cleaning Product - General Use. The description of Category Code A1 Cleaning Product - General Use is as follows:

These products are used for general cleaning on all surfaces, or for use with steam or mechanical cleaning devices in all departments. They are typically neutral or mildly alkaline products consisting of any combination of soaps, detergents, wetting agents, emulsifiers, solubilizers, and common inorganic builders.

The following apply to this product as well as all other cleaning products under Category Code A1:

1. All food products and packaging materials shall be removed or carefully protected prior to usage;
2. A potable water rinse is required after use;
3. When used according to manufacturer's instructions, cleaners shall not exhibit a noticeable odor nor leave a visible residue;

Special Liquid Caustic is free from undesirable microorganisms and is guaranteed safe and adequate as Category Code: A1 Cleaning Product - General Use when used as directed. This product does not intentionally contain any of the following heavy metals: antimony, arsenic, cadmium, lead, mercury, or selenium. None of the ingredients in this product are considered to be carcinogens, mutagens, teratogens, mineral acids, or odorous unless otherwise specified.

This document serves as a continuing letter of assurance and satisfies the conditions of 21 CFR Section 110.35 and the USDA Sanitation Performance Standards Compliance Guide.

Sincerely,

*Original Signed By:*

Ida Mariam  
VP Technology & Regulatory Affairs

January 21, 2016

\_\_\_\_\_  
Date

# Letter of Guarantee

# Special Liquid Caustic

Morgan-Gallacher, Inc. guarantees the product Special Liquid Caustic complies with the requirements set forth by the USDA FSIS for Nonfood Compounds Category Code A2: Cleaning Product - Soak Tanks and Steam/Mechanical Cleaning. The description of Category Code A2 Cleaning Product - Soak Tanks and Steam/Mechanical Cleaning is as follows:

These strongly alkaline products (containing in excess of 20 percent caustic soda or other ingredients with the equivalent causticity) may be acceptable for use in soak tanks or with steam or mechanical cleaning devices in any department.

The following apply to this product as well as all other cleaning products under Category Code A2:

1. All food products and packaging materials shall be removed or carefully protected prior to usage;
2. A potable water rinse is required after use;
3. When used according to manufacturer's instructions, cleaners shall not exhibit a noticeable odor nor leave a visible residue;

Special Liquid Caustic is free from undesirable microorganisms and is guaranteed safe and adequate as Category Code: A2 Cleaning Product - Soak Tanks and Steam/Mechanical Cleaning when used as directed. This product does not intentionally contain any of the following heavy metals: antimony, arsenic, cadmium, lead, mercury, or selenium. None of the ingredients in this product are considered to be carcinogens, mutagens, teratogens, mineral acids, or odorous unless otherwise specified.

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January 21, 2015

\_\_\_\_\_  
Date

## Concentration Verification Procedure

# Special Liquid Caustic

**Procedure No:** Caus1

**Procedure Name:** High-Alkalinity / Caustic  
Titration

**Test Kit No:** MRTK3000-Z

**Factor:** 1 Drop = 0.174 oz per gallon

**Purpose:**

To measure concentration of high-alkaline, or caustic detergent

**Required Components:**

- 1) 10 mL Vial
- 2) Phenolphthalein Indicator (MRPH1605)
- 3) Hydrochloric Acid 7.7N (MRHA6207)

**Procedure**

- 1) Rinse vial 3 times with solution to be tested.
- 2) Fill vial to the 10 mL mark with sample.
- 3) Add 3 drops of Phenolphthalein Indicator (MRPH1605) and swirl to mix. The sample should turn bright pink.
- 4) Add Hydrochloric Acid 7.7N (MRHA6207) drop-wise while swirling until the sample returns to its original color. Record the number of drops.
- 5) Multiply the number of drops by the factor to obtain amount of product.



# Special Liquid Caustic

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- Ultra-High Alkalinity
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**Net Contents:**

**Lot No.:**

**DOT Shipping Name:** UN 1824, Sodium Hydroxide Solution, 8, PG II

# Special Liquid Caustic High-Caustic Non-Foaming Detergent

# Product Class: Caustic

**Usage Directions:** C.I.P. Applications: Flush system with water. Prepare a solution in accordance with Dilution Guidelines chart. Circulate through the system until soils are loosened and/or removed as determined by inspection. Drain system and rinse thoroughly with potable water. Follow with sanitizer.

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These Guidelines Serve as Recommended Starting Points For Diluting This Product Only. The Dilution Required For Your Task May Vary. Contact Time, Temperature, Soil Load, and Other Factors Will Determine the Actual Dilution Required. Consult Your Morgan-Gallacher, Inc. Representative for More Specific Dilution Guidelines.

**Do Not Mix With Acidic Products. May Damage Painted Surfaces, Aluminum, Brass, Copper, Galvanized And/Or Other Soft Metals.**

### Empty Container Storage & Handling

Ensure Compliance with Local, State & Federal Regulations in Disposing of Container, Residual Contents and Rinsings. Drum Containers Must Be Completely Drained, Properly Closed and Promptly Returned to a Drum Reconditioner for Commercial Cleaning.

**This Product Is Intended For Industrial and Institutional Use Only**  
**KEEP OUT OF REACH OF CHILDREN**

### Safety & Hazards



Wear Protective Eye Glasses, Chemical-Resistant Gloves and Waterproof Apron While Using Special Liquid Caustic

### Danger

This product contains Sodium Hydroxide. May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Keep out of reach of children. Read label before use. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Take any precaution to avoid mixing with acid products.

### GHS Response Phrases

**IF ON SKIN (OR HAIR)** Remove/take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes. Get immediate medical advice/attention.

**IF IN EYES** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

**IF INHALED** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, get immediate medical advice/attention.

**IF SWALLOWED** Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.

**Consult SDS for Further Safety Precautions**

Products Manufactured By:



Made in the USA

8707 Millergrrove Drive • Santa Fe Springs • CA 90670  
(562) 695-1232 • FAX: (562) 699-8953

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Code:** MORGAN-220-BULK  
**Product Name:** Special Liquid Caustic Soda  
**Company Name:** Morgan-Gallacher, Inc.  
 8707 Millergrove Drive  
 Santa Fe Springs, CA 90670  
**Emergency Contact:** CHEMTREC

**Phone Number:**  
 +1 (562)695-1232  
 +1 (800)424-9300

**2. HAZARDS IDENTIFICATION**

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



**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:** P234 - Keep only in original container.  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
 P264 - Wash hands thoroughly after handling.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**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):** Chronic: Prolonged or repeated skin contact may cause dermatitis. Probable mucosal damage may contraindicate the use of gastric lavage.

**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:** Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause severe and



permanent damage to the digestive tract.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-73-2	Sodium hydroxide	<50.0 %
6419-19-8	Methylene phosphonic acid	< 5.0 %

### 4. FIRST AID MEASURES

#### Emergency and First Aid

##### Procedures:

**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. Rinse mouth. 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. Show this safety data sheet to the doctor in attendance.

### 5. FIRE FIGHTING MEASURES

**Flash Pt:** NA Method Used: Not Applicable

**Explosive Limits:** LEL: No data. UEL: No data.

**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. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials. Toxic fumes may be emitted under fire conditions.

**Flammable Properties and Hazards:** No data available.

### 6. ACCIDENTAL RELEASE MEASURES

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

**Environmental Precautions:** Do not let product enter drains, sewers, watersheds or water systems.

**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

<b>Precautions To Be Taken in Handling:</b>	Avoid inhalation of vapor or mist. Avoid contact with skin and eyes. Wash thoroughly after handling. Use only in a well-ventilated area. Keep container tightly closed. Keep away from heat, sparks and flame.
<b>Precautions To Be Taken in Storing:</b>	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from acids.
<b>Other Precautions:</b>	Handle in accordance with good industrial hygiene and safety practice. Keep out of reach of children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1310-73-2	Sodium hydroxide	PEL: 2 mg/m3	CEIL: 2 mg/m3	No data.
6419-19-8	Methylene phosphonic acid	No data.	No data.	No data.

<b>Respiratory Equipment (Specify Type):</b>	If vapor concentration exceeds ACGIH-TLV or OSHA-PEL, use NIOSH/MSHA approved respirator with an organic vapor cartridge.
<b>Eye Protection:</b>	Wear safety glasses with side shields or chemical splash goggles.
<b>Protective Gloves:</b>	Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.
<b>Other Protective Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Engineering Controls (Ventilation etc.):</b>	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.
<b>Work/Hygienic/Maintenance Practices:</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical States:</b>	[ ] Gas    [ X ] Liquid    [ ] Solid	
<b>Appearance and Odor:</b>	Appearance: Transparent. amber. Liquid.	
<b>Melting Point:</b>	NA	
<b>Boiling Point:</b>	>= 212.00 F	
<b>Decomposition Temperature:</b>	NA	
<b>Autoignition Pt:</b>	NA	
<b>Flash Pt:</b>	NA    Method Used: Not Applicable	
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.
<b>Specific Gravity (Water = 1):</b>	1.49	
<b>Density:</b>	12.40 LB/GA	
<b>Bulk density:</b>	NA	
<b>Vapor Pressure (vs. Air or mm Hg):</b>	NA	
<b>Vapor Density (vs. Air = 1):</b>	NA	
<b>Evaporation Rate:</b>	NA	
<b>Solubility in Water:</b>	Complete	
<b>Saturated Vapor Concentration:</b>	NA	
<b>Viscosity:</b>	NA	
<b>pH:</b>	> 13 - (1% Soln)	
<b>Percent Volatile:</b>	51.0 % by weight.	
<b>VOC / Volume:</b>	NA	

**Particle Size:** NA  
**Heat Value:** NA  
**Corrosion Rate:** 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:** High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, phosphine, phosphorus, and oxides of: phosphorus, and. sodium.

**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 information available.  
Teratogenicity: No information available.  
Reproductive Effects: No data available.  
Mutagenicity: No information available.  
Neurotoxicity: No data available.

**Irritation or Corrosion:** Other Studies: CAS# 1310-73-2  
Acute toxicity, LD50, Oral, Mouse, 5800mg/kg.

Other Studies: CAS# 1310-73-2  
Standard Draize Test, Eyes, Species: Rabbit, 400.0 ug

Other Studies: CAS# 6419-19-8:  
Standard Draize Test, Skin, Species: Rabbit, 500 mg, 24H  
Standard Draize Test, Eyes, Species: Rabbit, 100 mg.

Other Studies: CAS# 6419-19-8:  
Acute toxicity, LD50, Oral, Rat, 2100mg/kg.

**Carcinogenicity/Other Information:** 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.

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.

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:** Environmental: No information available.  
Physical: No information available.

**Results of PBT and vPvB assessment:** Other Studies: CAS# 1310-73-2:  
LC50, Common Shrimp, Sand Shrimp (Crangon crangon), adult(s), 33000 - 100000 ug/L, 48H, Mortality  
LC50, Western Mosquitofish (Gambusia affinis), adult(s), 125000 ug/L, 96H, Mortality  
LC50, Cockle (Cerastoderma edule), adult(s) 330000 - 1000000 ug/L, 48H, Mortality  
LC50, Guppy (Poecilia reticulata)}, young organism(s), 196.0 mg/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:** 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. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**14. TRANSPORT INFORMATION**

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Sodium hydroxide solution.  
**DOT Hazard Class:** 8 CORROSIVE  
**UN/NA Number:** UN1824 **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)
1310-73-2	Sodium hydroxide	No	Yes 1000 LB	No
6419-19-8	Methylene phosphonic acid	No	No	No

**CAS # Hazardous Components (Chemical Name)**

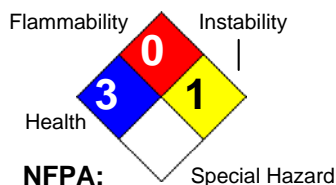
**Other US EPA or State Lists**

1310-73-2	Sodium hydroxide	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: Yes - 1706; NY Part 597: Yes; PA HSL: Yes - E
6419-19-8	Methylene phosphonic acid	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

**16. OTHER INFORMATION**

**Revision Date:** 04/16/2015

**Hazard Rating System:**



**Additional Information About** No data available.

**This Product:**

**Company Policy or**

**Disclaimer:**

While Morgan-Gallacher believes the statements set forth herein are accurate as of the date hereof, Morgan-Gallacher makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation, and verification.

## 1. IDENTIFICACIÓN DEL PRODUCTO QUÍMICO Y LA EMPRESA

**Código del Producto:** MORGAN-220-BULK  
**Nombre del Producto:** Special Liquid Caustic Soda  
**Nombre de la Empresa:** Morgan-Gallacher, Inc.  
 8707 Millergrove Drive  
 Santa Fe Springs, CA 90670  
**Contenido:** 55 Gallones  
**Número De Teléfono:** +1 (562)695-1232  
**Contacto De la Emergencia:** CHEMTREC +1 (800)424-9300

## 2. IDENTIFICACIÓN DE LOS RIESGOS

Sustancias y mezclas corrosivas para los metales, Categoría 1

Corrosión/irritación cutáneas, Categoría 1A

Lesiones oculares graves/irritación ocular, Categoría 2A

Toxicidad aguda por ingestión, Categoría 4



**SGA Palabra de advertencia:** Peligro

**Frases del peligro de SGA:** H290 - Puede ser corrosiva para los metales.  
 H302 - Dañino si es deglutido.  
 H314 - Provoca graves quemaduras en la piel y lesiones oculares.

**Frases de la precaución de SGA:** P234 - Conservar únicamente en el recipiente original.  
 P260 - No respirar dust/fume/gas/mist/vapors/spray.  
 P264 - Lavarse cuidadosamente las manos después de la manipulación.  
 P280 - Usar guantes /ropa protectora/equipo de protección para los ojos/la cara.

**Frases de la respuesta de SGA:** P303+361+353 - EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitar inmediatamente la ropa contaminada. Lavar la piel con agua/ ducharse.  
 P315 - Buscar asistencia médica inmediata.  
 P304+340 - EN CASO DE INHALACIÓN: Transportar a la víctima al aire libre y mantenerla en una posición que facilite la respiración.  
 P342 - En caso de síntomas respiratorios:  
 P315 - Buscar asistencia médica inmediata.  
 P305+351+338 - EN CASO DE CONTACTO CON LOS OJOS: Lavar con agua cuidadosamente durante varios minutos. Quitar en su caso las lentes de contacto, si puede hacerse con facilidad. Proseguir con el lavado.  
 P315 - Buscar asistencia médica inmediata.  
 P301+330+331 - EN CASO DE INGESTIÓN: Enjuagarse la boca. NO provocar el vómito.  
 P315 - Buscar asistencia médica inmediata.

**Frases del almacenaje y de la disposición de SGA:** P405 - Guardar bajo llave.  
 P501 - Eliminar el contenido/recipiente ...

**Estado regulador del OSHA:** Este material está clasificado como peligroso bajo las regulaciones de la OSHA.

<b>Potenciales efectos en la salud (Agudo o Crónico):</b>	Crónica: El contacto de piel prolongada o repetida puede causar dermatitis. Los efectos pueden no ser inmediatos..
<b>Inhalación:</b>	La inhalación puede causar irritación, tos, dolor de garganta, y en casos extremos, edema pulmonar. La inhalación de vapores puede causar somnolencia y vértigos.
<b>Contacto con la piel:</b>	Causa quemaduras severas con la destrucción retrasada del tejido. Puede causar irritación de la piel. Rojez y dolor de las causas.
<b>Contacto con los ojos:</b>	Puede provocar una irritación en los ojos. Quemaduras severas del ojo de las causas. Puede causar lesiones oculares irreversibles. Rojez y dolor de las causas.
<b>Ingestión:</b>	Causa dolor severo, náusea, vomitar, diarrea, y choque. Podría causar daño severo y permanente a la zona digestiva.

### 3. COMPOSICIÓN/ INFORMACIÓN SOBRE LOS COMPONENTES

Numeros	Componentes peligrosos [química nombre]	Concentración
1310-73-2	El hidróxido de sodio	<50.0 %
6419-19-8	Ácido nitrilotrimetilentrifosfónico	< 5.0 %

### 4. MEDIDAS EN PRIMEROS AUXILIOS

**Procedimientos de Emergencia y Primeros Auxilios:**

<b>En caso de inhalación:</b>	Quite de la exposición y del movimiento al aire fresco inmediatamente. Consiga la ayuda médica inmediatamente. No utilice la resucitación de la boca-a-boca.
<b>En caso de contacto con la piel:</b>	Limpie la piel con un chorro de agua con el un montón de 15 minutos del agua por lo menos mientras que quita la ropa contaminada y los zapatos. Consiga la ayuda médica inmediatamente. Lave la ropa antes de la reutilización.
<b>En caso de contacto con los ojos:</b>	Ojos rasantes con el un montón de 15 minutos del agua por lo menos , de vez en cuando levantando los párpados superiores y más bajos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando. Consiga la ayuda médica inmediatamente.
<b>En caso de ingestión:</b>	Nunca debe administrarse nada por la boca a una persona inconsciente. Enjuagarse la boca. NO provocar el vómito. Si la víctima está consciente y alerta, dé 2-4 de leche o de agua.
<b>Informe para el médico:</b>	Convite sintomático y de apoyo. Mostrar esta ficha de seguridad al doctor que esté de servicio.

### 5. MEDIDAS DE LUCHA CONTRA INCENDIOS

<b>Punto de encendido:</b>	NA Método usado: No aplicable
<b>Límites de explosión:</b>	LEI: No información LES: No información
<b>Punto de Auto-Ignición:</b>	NA
<b>Medios Que extinguen Convenientes:</b>	Para pequeños incendios, use polvo químico seco, dióxido de carbono, agua pulverizada o espuma resistente al alcohol. Para incendios grandes, utilice agua pulverizada, niebla o espuma resistente al alcohol. Utilice el aerosol de agua para refrescar los envases fuego-expuestos. No utilice las corrientes rectas del agua.
<b>Instrucciones para combatir el fuego:</b>	Como en cualquier fuego, use un aparato respiratorio autónomo en presión-exigen, MSHA/NIOSH (aprobado o equivalente), y engranaje protector lleno. Utilice el aerosol de agua para mantener los envases fuego-expuestos frescos. Entre en contacto con con humedad o el agua puede generar suficiente calor para encender los materiales combustibles próximos. Vapores tóxicos pueden producirse en caso de incendio.
<b>Propiedades y riesgos de materiales inflamables:</b>	No disponible

## 6. MEDIDAS CONTRA FUGAS ACCIDENTALES

- Precauciones protectoras, equipo protector y procedimientos de emergencia:** Utilice el equipo protector personal apropiado según lo indicado en la sección 8.
- Precauciones ambientales:** No dejar que el producto penetre en los desagües, alcantarillas, cuencas o sistemas hídricos.
- Pasos a ser tomados en cuenta en caso de que material se fugue o derrame:** Absorba el derramamiento con el material inerte (e.g. vermiculita, arena o tierra), después colóquelo en envase conveniente. Evitar respirar los vapores, la neblina o el gas. Asegúrese una ventilación apropiada. Retirar todas las fuentes de ignición. No dejar que el producto entre en el sistema de alcantarillado. La descarga en el ambiente debe ser evitada.

## 7. MANIPULACIÓN Y ALMACENAMIENTO

- Precauciones a ser tomadas en la manipulación:** Evitar la inhalación de vapor o neblina. Evitar contacto con la piel y los ojos. Lavarse cuidadosamente después de la manipulación. Utilice solamente en un área well-ventilated. Mantener el recipiente herméticamente cerrado. Guarde lejos de calor, de chispas y de la llama.
- Precauciones para ser tomadas en almacenaje:** Almacenar en un lugar fresco. Conservar el envase herméticamente cerrado en un lugar seco y bien ventilado. Guarde lejos de los ácidos.
- Otras precauciones:** Manipular de acuerdo con las buenas prácticas de higiene y seguridad industrial. Mantener fuera del alcance de los niños.

## 8. CONTROL DE EXPOSICIÓN / PROTECCIÓN PERSONAL

Numeros	Nombre Químico Parcial	OSHA TWA	ACGIH TWA	Otra Limites
1310-73-2	El hidróxido de sodio	PEL: 2 mg/m <sup>3</sup>	CEIL: 2 mg/m <sup>3</sup>	No información
6419-19-8	Ácido nitrilotrimetilentrifosfónico	No información	No información	No información

**Equipo respiratorio (especificar el tipo):** Si la concentración de vapores supera ACGIH-TLV o OSHA-PEL, use NIOSH / MSHA con un cartucho para vapores orgánicos.

**Protección ocular:** Use anteojos de seguridad con protectores laterales o gafas contra salpicaduras químicas.

**Guantes protectores:** Use los guantes protectores apropiados para prevenir la exposición de piel. Guantes de goma o neopreno.

**Otras ropas protectoras:** Use la ropa protectora apropiada para prevenir la exposición de piel.

**Medidas de ingeniería [ventilación, etc.]:** Las instalaciones que almacenan o que utilizan este material se deben equipar de una facilidad del colirio y de una ducha de la seguridad. Utilice la ventilación de extractor general o local adecuada para guardar concentraciones aerotransportadas debajo de los límites de exposición permitidos.

**Prácticas de trabajo / higiene / mantenimiento:** Manipular con las precauciones de higiene industrial adecuadas, y respetar las prácticas de seguridad.



## 9. PROPIEDADES FÍSICAS Y QUÍMICAS

<b>Estado físico:</b>	[ ] Gas [ X ] Líquido [ ] Solido	
<b>Aspecto y Olor:</b>	Appearance: Transparente. ambarino. Líquido.	
<b>Punto de Fusión:</b>	NA	
<b>Punto de Ebullición:</b>	>= 212.00 F	
<b>Temperatura de descomposición:</b>	NA	
<b>Punto de Auto-Ignición:</b>	NA	
<b>Punto de encendido:</b>	NA Método usado: No aplicable	
<b>Límites de explosión:</b>	LEI: No información	LES: No información
<b>Gravedad Específica (Agua = 1):</b>	1.49	
<b>Densidad:</b>	12.40 LB/GA	
<b>Densidad aparente:</b>	NA	
<b>Presión de Vapor (vs. Aire o mm Hg):</b>	NA	
<b>Densidad de Vapor (vs. Aire = 1):</b>	NA	
<b>Índice de evaporación:</b>	NA	
<b>Solubilidad en Agua:</b>	Complete	
<b>Concentración de Vapor Saturado:</b>	NA	
<b>Viscosidad:</b>	NA	
<b>pH:</b>	> 13 - (1% Soln)	
<b>Volatilidad:</b>	51.0 % by weight.	
<b>COV/Volumen:</b>	NA	
<b>Tamaño de partícula:</b>	NA	
<b>Principios del calor:</b>	NA	
<b>Tarifa De la Corrosión:</b>	NA	

## 10. ESTABILIDAD Y REACTIVIDAD

<b>Estabilidad:</b>	Inestable [ ] Estable [ X ]
<b>Condiciones para evitar - Inestabilidad:</b>	No permita el contacto con agua. La luz solar directa.
<b>Incompatibilidad - Materiales para evitar:</b>	ácidos, Agentes oxidantes fuertes, El contacto de este producto con muchos metales "activos" como el aluminio, el estano, el cobre, el zinc, y la aleacion pueden causar la formación de gas hidrógeno inflamable.
<b>Peligrosa descomposición o derivados del producto:</b>	Las altas temperaturas y condiciones de incendio pueden resultar en la formación de monóxido de carbono y dióxido de carbono, Fosfino, fósforo, y los óxidos de: fósforo, y sodio.
<b>Posibilidad de reacciones peligrosas:</b>	Sucedará [ ] No sucederá [ X ]
<b>Condiciones para evitar - Reacciones Peligrosas:</b>	No disponible

## 11. INFORMACIÓN TOXICOLÓGICA

<b>Información Toxicológica:</b>	Epidemiología: No hay información disponible. Teratogenicidad: No hay información disponible. Efectos sobre la reproducción: No hay datos disponibles. Mutagenicidad: No hay información disponible. Neurotoxicidad: No hay datos disponibles.
<b>Irritación o la corrosión:</b>	Otros Estudios: CAS # 1310-73-2 Toxicidad aguda, DL50, oral, ratón, 5.800 mg/kg.  Otros Estudios: CAS # 1310-73-2 Prueba Draize estándar, Ojos, Especies: conejo, 400,0 ug. Otros Estudios: CAS # 6419-19-8: Prueba Draize estándar, Piel, Especies: conejo, 500 mg, 24H Prueba Draize estándar, Ojos, Especies: conejo, 100 mg.  Otros Estudios: CAS # 6419-19-8: Toxicidad aguda, DL50, oral, Rata, 2100mg/kg.
<b>Carcinogenicidad/Otras informaciones:</b>	ACGIH: No se identifica ningún componente de este producto, que presente niveles mayores que o el igual a 0,1% como cancerígeno o como carcinógeno potencial por la ACGIH.  IARC: No se identifica ningún componente de este producto, que presente niveles mayores que o el igual a 0,1% como cancerígeno o como carcinógeno potencial por la IARC.  NTP: En este producto no se identifica ningún componente, que presente niveles mayores que o iguales a 0.1%, como agente carcinógeno conocido o anticipado por el (NTP) Programa Nacional de Toxicología.  No se identifica ningún componente de este producto, que presente niveles mayores que o el igual a 0,1% como cancerígeno o como carcinógeno potencial por la (OSHA) Administración de Salud y Seguridad Ocupacional.
<b>Carcinogenicidad:</b>	NTP No      IARC No      Regulado por OSHA? No

## 12. INFORMACIÓN ECOLÓGICA

<b>Información Ecológica:</b>	Medioambiental: No hay información disponible. Físico: No hay información disponible.
<b>Resultados de la valoración PBT y mPmB:</b>	Otros Estudios: CAS # 1310-73-2: CL50, Camarón Común, Camarón Sand (Crangon crangon), adulto (s), 33.000 a 100.000 g / L, 48H, Mortalidad CL50, Mosquitofish Occidental (Gambusia affinis), adulto (s), 125000 ug / L, 96H, Mortalidad CL50, Berberecho (Cerastoderma edule), adulto (s) 330000 a 1000000 ug / L, 48H, Mortalidad CL50, Guppy (Poecilia reticulata)}, organismo joven (s), 196,0 mg / L, 96H, Mortalidad.
<b>Persistencia y degradabilidad:</b>	Sin datos disponibles.
<b>Potencial de bioacumulación:</b>	Sin datos disponibles.
<b>Movilidad en el suelo:</b>	Sin datos disponibles.

### 13. CONSIDERACIONES RELACIONADAS A LA ELIMINACIÓN

**Método de eliminación los desperdicios:** Los generadores inútiles del producto químico deben determinar si un producto químico desechado está clasificado como desechos peligrosos. Las pautas de los E.E.U.U. EPA para la determinación de la clasificación se enumeran en 40 partes de CFR 261. Además, los generadores inútiles deben consultar el estado y regulaciones locales de los desechos peligrosos para asegurar la clasificación completa y exacta. Observar todos los reglamentos estatales y locales sobre la protección del medio ambiente. Para la eliminación de este producto, dirigirse a un servicio profesional autorizado.

### 14. INFORMACIÓN RELACIONADA AL TRANSPORTE

**TRANSPORTE POR TIERRA (US DOT):**

**DOT Nombre propio del envío:** Solución de hidróxido de sodio.  
**Clase De Peligro (DOT):** 8 CORROSIVO  
**Número UN/NA:** UN1824 **Grupo del embalaje:** II



### 15. INFORMACIÓN REGLAMENTARIA

**Lista de la Ley de Reautorización y Enmiendas de Grandes Reservas(SARA) del 1986**

Numeros CAS	Componentes peligrosos [química nombre]	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1310-73-2	El hidróxido de sodio	No	Sí 1000 LB	No
6419-19-8	Ácido nitrilotrimetilentrifosfónico	No	No	No

**Numeros CAS Componentes peligrosos [química nombre]**

1310-73-2	El hidróxido de sodio
6419-19-8	Ácido nitrilotrimetilentrifosfónico

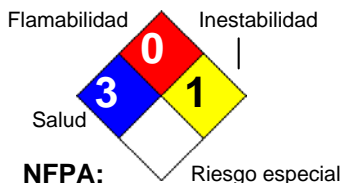
**Otros E.E.U.U. EPA o listas del estado**

TSCA: Sí - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Sí; MI CMR, Part 5: Part 5; NJ EHS: Sí - 1706; NY Part 597: Sí; PA HSL: Sí - E  
TSCA: Sí - 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

### 16. OTRAS INFORMACIONES

**Fecha de la revisión:** 04/16/2015

**Sistema de Estimación del Riesgo:**



**Información adicional acerca de este producto:** No disponible

**Política o negación de la compañía:** Mientras Morgan-Gallacher cree las declaraciones que figuran en el presente documento son exactas a partir de la fecha del presente, Morgan-Gallacher ofrece ninguna garantía con respecto a la misma y se exime expresamente de toda responsabilidad por relación a lo mencionado. Estos datos se brindan sólo para evaluación, investigación y verificación.