

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: MORGAN-072-BULK
Product Name: FCC-2
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
Product Category: Chlorinated Alkali Detergent

2. HAZARDS IDENTIFICATION

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



GHS Signal Word: **Danger**

GHS Hazard Phrases: May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Toxic to aquatic life.

GHS Precaution Phrases: 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 combustibles, acid products, and ammoniated 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.
If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes.
Wash with plenty of water for 15 minutes. Get immediate medical advice/attention.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Wash contaminated clothing before reuse.

GHS Storage and Disposal Phrases: Store locked up.
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: Probable mucosal damage may contraindicate the use of gastric lavage.

Inhalation: May be harmful if inhaled. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract.

Skin Contact: May be harmful if absorbed through the skin. Causes redness and pain. Causes skin irritation. May cause severe burns with delayed tissue destruction.

Eye Contact: Causes redness and pain. Causes severe eye burns. Contact may cause ulceration of the conjunctiva and cornea. May cause irreversible eye injury.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause severe and permanent damage to the digestive tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-58-3	Potassium hydroxide	<15.0 %
7681-52-9	Sodium hypochlorite	< 5.0 %
7320-34-5	TKPP	< 5.0 %
1643-20-5	Dodecyldimethylamine oxide	< 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.

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 if irritation develops or persists. 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 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

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

Autoignition Pt: NA

Suitable Extinguishing Media: Dry chemical, carbon dioxide, foam.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

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.
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. Clean up spills immediately, observing precautions in the Protective Equipment section. Ensure adequate ventilation.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Avoid extremely high temperature. Use with adequate ventilation.
Precautions To Be Taken in Storing:	Store in a cool, dry, well-ventilated area away from incompatible substances. Store in a tightly closed container. Protect containers against damage. Keep container closed when not in use.

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.
7681-52-9	Sodium hypochlorite	No data.	TLV: 0.5 ppm as Cl2 STEL: 1 ppm as Cl2	No data.
7320-34-5	TKPP	No data.	No data.	No data.
1643-20-5	Dodecyltrimethylamine oxide	No data.	No data.	No data.

Respiratory Equipment (Specify Type):	Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Eye Protection:	Splash proof safety goggles.
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.):	Use adequate ventilation to keep airborne concentrations low. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Work/Hygienic/Maintenance Practices:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [X] Liquid [] Solid	
Appearance and Odor:	Clear Yellow Liquid. Odor: Mild. chlorine.	
pH:	> 12.0	
Melting Point:	No data.	
Boiling Point:	>= 212.00 F	
Flash Pt:	NA	
Evaporation Rate:	NA	
Flammability (solid, gas):	No data available.	
Explosive Limits:	LEL: No data.	UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	NA	
Vapor Density (vs. Air = 1):	NA	

Specific Gravity (Water = 1): 1.18 - 1.2
Density: NA
Solubility in Water: Soluble
Saturated Vapor Concentration: NA
Octanol/Water Partition Coefficient: No data.
Percent Volatile: 0.0 % by weight.
Autoignition Pt: NA
Decomposition Temperature: No data.
Viscosity: 100 - 150 CPS

10. STABILITY AND REACTIVITY

Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability: Incompatible materials, Excess heat, Light.
Incompatibility - Materials To Avoid: Strong oxidizing agents, Acids, Metals, ammonia.
Hazardous Decomposition or Byproducts: High temperatures and fires may produce toxic: carbon and nitrogen oxides chlorine, hydrogen chloride, hydrogen gas, carbon monoxide, carbon dioxide, oxides of sodium, 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 information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: No information available.
Neurotoxicity: No information available.

CAS# 1310-58-3: Potassium hydroxide: Acute toxicity, LD50, Oral, Rat, 273.0 MG/KG.
CAS# 7681-52-9: Sodium hypochlorite: Acute toxicity, LD50, Oral, Mouse, 5800. MG/KG.
Standard Draize Test, Eyes, Rabbit, 1.310 mg, Mild.
CAS# 7320-34-5: TKPP: Acute toxicity, LDLO, Oral, Rat, 4640. MG/KG.
Acute toxicity, LD50, Skin, Species: Rabbit, > 4640. MG/KG.
CAS# 1643-20-5: Dodecyldimethylamine oxide: Acute toxicity, LD50, Oral, Mouse, 2700. MG/KG.
Standard Draize Test, Skin, Species: Rabbit, 2.000 MG, 24 H.
Standard Draize Test, Eyes, Species: Rabbit, 1.000 %.

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: CAS# 7681-52-9:
Acute toxicity, LD50, Oral, Mouse, 5800 mg/kg

Other Studies: CAS# 7681-52-9:
Standard Draize Test, Eyes, Species: Rabbit, 1.310 mg, Mild

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 : is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity:

NTP? No IARC Monographs? No OSHA Regulated? No

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
1310-58-3	Potassium hydroxide	n.a.	n.a.	n.a.	n.a.
7681-52-9	Sodium hypochlorite	n.a.	n.a.	n.a.	n.a.
7320-34-5	TKPP	n.a.	n.a.	n.a.	n.a.
1643-20-5	Dodecyltrimethylamine oxide	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information:

Environmental: No information found.
Physical: No information found.

CAS# 7681-52-9: Sodium hypochlorite: LC50, Harpacticoid Copepod (Nitocra spinipes), adult(s), 38000. UG/L, 96 H, Mortality.
CAS# 7320-34-5: TKPP: LC50, Zebra Mussel (Dreissena polymorpha), adult(s), 94000. UG/L, 24 H, Mortality.

Results of PBT and vPvB assessment:

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

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

Other Studies: CAS# 7681-52-9
LC50, Rainbow trout (Oncorhynchus mykiss), 59.00 ug/L, 96H, Mortality
LC50, Water flea (Daphnia magna), 32.00 ug/L, 48H, Mortality
LC50, Bleak (Alburnus alburnus), 30000 - 35000 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: 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 regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, basic, inorganic, N.O.S. (Potassium hydroxide, sodium hypochlorite)
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN3266 **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
7681-52-9	Sodium hypochlorite	No	Yes 100 LB	No
7320-34-5	TKPP	No	No	No
1643-20-5	Dodecyldimethylamine oxide	No	No	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- | | |
|---|--|
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Explosive | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Acute toxicity (any route of exposure) |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Flammable (gases, aerosols, liquid, or solid) | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Skin Corrosion or Irritation |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Oxidizer (liquid, solid or gas) | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Serious eye damage or eye irritation |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-reactive | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Respiratory or Skin Sensitization |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric (liquid or solid) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Germ cell mutagenicity |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric gas | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Carcinogenicity |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-heating | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reproductive toxicity |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Organic peroxide | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specific target organ toxicity (single or repeated exposure) |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Corrosive to metal | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Aspiration Hazard |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Gas under pressure (compressed gas) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Simple Asphyxiant |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No In contact with water emits flammable gas | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Health) Hazard Not Otherwise Classified (HNOC) |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Combustible Dust | |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Physical) Hazard Not Otherwise Classified (HNOC) | |

CAS # Hazardous Components (Chemical Name)

Other US EPA or State Lists

1310-58-3 Potassium hydroxide	CWA NPDES: No; 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: HS; PA HSL: Yes - E
7681-52-9 Sodium hypochlorite	CWA NPDES: No; 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: HS; PA HSL: Yes - E
7320-34-5 TKPP	CWA NPDES: No; 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
1643-20-5 Dodecyldimethylamine oxide	CWA NPDES: No; 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: 02/27/2018

Additional Information About This Product: 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.