

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Code:** MORGAN-264--BUL  
**Product Name:** Liquid FM-1000 S  
**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

**Acute Toxicity: Oral, Category 4**

**Skin Corrosion/Irritation, Category 1A**

**Serious Eye Damage/Eye Irritation, Category 2A**



**GHS Signal Word:** **Danger**

**GHS Hazard Phrases:** Harmful if swallowed.  
Causes severe skin burns and eye damage.

**GHS Precautionary Phrases:** Keep out of reach of children.  
Read label before use.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
Do not get in eyes, on skin, or on clothing.  
Wash hands thoroughly after handling.  
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 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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes.  
Get immediate medical advice/attention.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.

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

**Inhalation:** Harmful if inhaled. May cause respiratory tract irritation.

**Skin Contact:** May cause skin irritation. Repeated or prolonged exposure may cause drying of the skin.  
May cause a burning sensation of the skin.

**Eye Contact:** May cause eye irritation and burns.

**Ingestion:** May be harmful if swallowed. May cause gastrointestinal irritation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1312-76-1	Potassium silicate	<10.0 %
1310-58-3	Potassium hydroxide	< 5.0 %
NA	Phosphate	< 5.0 %
NA	Surfactant	<15.0 %

### 4. FIRST AID MEASURES

#### Emergency and First Aid

#### Procedures:

<b>In Case of Inhalation:</b>	Remove from exposure and move to fresh air immediately. Get medical aid.
<b>In Case of Skin Contact:</b>	Flush skin with plenty of water. Get medical aid if irritation develops or persists.
<b>In Case of Eye Contact:</b>	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.
<b>In Case of Ingestion:</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention immediately.
<b>Note to Physician:</b>	Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

### 5. FIRE FIGHTING MEASURES

<b>Flash Pt:</b>	No data.	
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.
<b>Autoignition Pt:</b>	No data.	
<b>Suitable Extinguishing Media:</b>	Use water spray, dry chemical, carbon dioxide, or chemical foam.	
<b>Fire Fighting Instructions:</b>	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.	
<b>Flammable Properties and Hazards:</b>	No data available.	
<b>Hazardous Combustion Products:</b>	No data available.	

### 6. ACCIDENTAL RELEASE MEASURES

<b>Protective Precautions, Protective Equipment and Emergency Procedures:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Environmental Precautions:</b>	Do not let this chemical enter the environment. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section.
<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Provide ventilation. Do not get water on spilled substances or inside containers. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

## 7. HANDLING AND STORAGE

**Precautions To Be Taken in Handling:** Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Keep container tightly closed.

**Precautions To Be Taken in Storing:** Store in a cool, dry, well-ventilated area away from incompatible substances. Store in a tightly closed container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1312-76-1	Potassium silicate	No data.	No data.	No data.
1310-58-3	Potassium hydroxide	PEL: 2.0 mg/m3	CEIL: 2 mg/m3	No data.
NA	Phosphate	No data.	No data.	No data.
NA	Surfactant	No data.	No data.	No data.

**Respiratory Equipment (Specify Type):** Respiratory protection is not required under normal use.

**Eye Protection:** Wear chemical splash 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.):** No data available.

**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:** Clear. Liquid.  
Transparent.

**pH:** > 12.0

**Melting Point:** No data.

**Boiling Point:** No data.

**Flash Pt:** No data.

**Evaporation Rate:** No data.

**Flammability (solid, gas):** No data available.

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

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Specific Gravity (Water = 1):** 1.075 - 1.085

**Solubility in Water:** No data.

**Octanol/Water Partition Coefficient:** No data.  
**Autoignition Pt:** No data.  
**Decomposition Temperature:** No data.  
**Viscosity:** No data.

**10. STABILITY AND REACTIVITY**

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** Incompatible materials, ignition sources.  
**Incompatibility - Materials To Avoid:** Strong oxidizing agents, Strong acids.  
**Hazardous Decomposition or Byproducts:** oxides of phosphorus, Toxic fumes of sodium oxide, Carbon monoxide.  
**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.  
 Teratogenicity: No data available.  
 Reproductive Effects: No data available.  
 Mutagenicity: No data available.  
 Neurotoxicity: No data available.

**Carcinogenicity/Other Information:** CAS# 1310-58-3: Potassium hydroxide: Acute toxicity, LD50, Oral, Rat, 273.0 MG/KG.  
 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.  
 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.  
 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.

<b>Carcinogenicity:</b>		NTP? No	IARC Monographs? No	OSHA Regulated? No		
<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>NTP</b>	<b>IARC</b>	<b>ACGIH</b>	<b>OSHA</b>	
1312-76-1	Potassium silicate	n.a.	n.a.	n.a.	n.a.	
1310-58-3	Potassium hydroxide	n.a.	n.a.	n.a.	n.a.	
NA	Phosphate	n.a.	n.a.	n.a.	n.a.	
NA	Surfactant	n.a.	n.a.	n.a.	n.a.	

**12. ECOLOGICAL INFORMATION**

**General Ecological Information:** Environmental: No information available.  
Physical: No information available.

CAS# NA: Surfactant: LC50, Water Flea (Daphnia magna), 9.300 - 21.40 MG/L, 48 H.

**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:** Not Regulated.

**DOT Hazard Class:**

**UN/NA Number:**

**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)
1312-76-1	Potassium silicate	No	No	No
1310-58-3	Potassium hydroxide	No	Yes 1000 LB	No
NA	Phosphate	No	No	No
NA	Surfactant	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 type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" 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**

1312-76-1 Potassium silicate

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

1310-58-3 Potassium hydroxide

CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No;

NA Phosphate

NA Surfactant

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  
CWA NPDES: No; TSCA: No; 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  
CWA NPDES: No; TSCA: No; 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:** 01/15/2019

**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.