

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: MORGAN-084-BULK
Product Name: FM 1000 W/Rust Inhibitor
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 1C
Serious Eye Damage/Eye Irritation, Category 2
Acute Toxicity: Oral, Category 4



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.
Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not get in eyes, on skin, or on clothing.

GHS Response Phrases: 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. Get immediate medical advice/attention.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of water for 15 minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.

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.

Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.

Skin Contact: Causes skin irritation. May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation. Causes eye burns.

Ingestion: May cause irritation of the digestive tract. Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
6834-92-0	Sodium metasilicate	<45.0 %
60864-33-7	Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramet hylbutyl)phenoxy]-	< 5.0 %
7632-00-0	Sodium nitrite	< 5.0 %
10101-89-0	Phosphoric acid, trisodium salt, dodecahydrate	<15.0 %
7758-29-4	STPP	<15.0 %

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.
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 immediate medical advice/attention.
In Case of Ingestion:	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.
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:	Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Use water spray, dry chemical, carbon dioxide, or appropriate 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. The product itself does not burn.
Flammable Properties and Hazards:	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
Hazardous Combustion Products:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, irritating and toxic fumes and gases, and oxides of: sodium, silicon, phosphorus, nitrogen, Contact of this product with many "active" metals such as aluminum, tin, copper, zinc, and most alloys can cause formation of flammable hydrogen gas.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Use proper personal protective equipment as indicated in Section 8.
Environmental Precautions:	Observe all federal, state, and local environmental regulations. Do not let product enter drains, sewers, watersheds or water systems.
Steps To Be Taken In Case Material Is Released Or Spilled:	Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid breathing vapors, mist or gas.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.
Precautions To Be Taken in Storing:	Keep away from acids. Keep container tightly closed in a dry and well-ventilated place.
Other Precautions:	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
6834-92-0	Sodium metasilicate	No data.	No data.	No data.
60864-33-7	Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	No data.	No data.	No data.
7632-00-0	Sodium nitrite	No data.	No data.	No data.
10101-89-0	Phosphoric acid, trisodium salt, dodecahydrate	No data.	No data.	No data.
7758-29-4	STPP	No data.	No data.	No data.

Respiratory Equipment (Specify Type):	A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.
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. Chemical resistant apron. Rubber or neoprene boots.
Engineering Controls (Ventilation etc.):	Local exhaust is suggested for use in enclosed or confined areas. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [] Liquid [X] Solid	
Appearance and Odor:	White. Free flowing granules.	
pH:	11.0 - 13.0 (2%Sol)	
Melting Point:	NA	
Boiling Point:	NA	
Flash Pt:	NA Method Used: Not Applicable	
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):	NA	
Density:	NA	
Bulk density:	NA	
Solubility in Water:	Complete	
Saturated Vapor Concentration:	NA	
Octanol/Water Partition Coefficient:	No data.	
Percent Volatile:	NA	
VOC / Volume:	NA	
HAP / Volume:	NA	
Autoignition Pt:	NA	
Decomposition Temperature:	NA	
Viscosity:	NA	
Particle Size:	NA	
Heat Value:	NA	
Corrosion Rate:	NA	

10. STABILITY AND REACTIVITY

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	High temperatures, Ignition sources, Incompatible materials.
Incompatibility - Materials To Avoid:	Strong 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, irritating and toxic fumes and gases, and oxides of: sodium, silicon, phosphorus, nitrogen.
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 found.
 Teratogenicity: Teratogenic effects have occurred in experimental animals.
 Reproductive Effects: No data available.
 Mutagenicity: No data available.
 Neurotoxicity: No data available.

CAS# 6834-92-0: Sodium metasilicate: Acute toxicity, LD50, Oral, Rat, 1153. MG/KG.
 Acute toxicity, LD50, Oral, Mouse, 770.0 MG/KG.
 CAS# 10101-89-0: Phosphoric acid, trisodium salt, dodecahydrate: Acute toxicity, LD50, Oral, Rat, 7400. MG/KG.
 Acute toxicity, LD50, Intraperitoneal, Mouse, 430.0 MG/KG.
 CAS# 7758-29-4: STPP: Acute toxicity, LD50, Oral, Rat, 3120. MG/KG.
 Acute toxicity, LD50, Oral, Mouse, 3100. MG/KG.

Irritation or Corrosion: Other Studies: CAS# 6834-92-0:
 Standard Draize Test, Skin, Species: Rabbit, 250.0 mg, 24H

Other Studies: CAS# 7632-00-0:
 Acute toxicity, LD50, Oral, Species: Rabbit, 180.0 mg/kg

Other Studies: CAS# 7632-00-0:
 Standard Draize Test, Eyes, Species: Rabbit, 500 mg, 24H

Other Studies: CAS# 6834-92-0:
 Acute toxicity, LD50, Oral, Rat, 1000 mg/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 : 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
6834-92-0	Sodium metasilicate	n.a.	n.a.	n.a.	n.a.
60864-33-7	Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	n.a.	n.a.	n.a.	n.a.
7632-00-0	Sodium nitrite	n.a.	n.a.	n.a.	n.a.
10101-89-0	Phosphoric acid, trisodium salt, dodecahydrate	n.a.	n.a.	n.a.	n.a.
7758-29-4	STPP	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information:

Environmental: Phosphates promote the eutrophication of lakes and other bodies of water.

Physical: No information available.

CAS# 6834-92-0: Sodium metasilicate: Effective concentration to 50% of test organisms., Water Flea (Ceriodaphnia dubia), neonate, 33.53 MG/L, 48 H, Intoxication., Effective concentration to 50% of test organisms., Blue-Green Algae (Microcystis aeruginosa), 800000. UG/L, Population.

CAS# 7758-29-4: STPP: LC50, Medaka, High-Eyes (Oryzias latipes), 820000. UG/L, 24 H, Mortality.

Effective concentration to 50% of test organisms., Green Algae (Pseudokirchneriella subcapitata), 60000. - 120000. UG/L, Population.

Effective concentration to 50% of test organisms., Water Flea (Ceriodaphnia dubia), neonate, 276.61 MG/L, 48 H, Intoxication.,

Results of PBT and vPvB assessment:

Other Studies: CAS# 7632-00-0:

LC50, Western Mosquitofish (Gambusia affinis), adult(s), 1500 ug/L, 96H, adults, Mortality

LC50, Rainbow trout (Oncorhynchus mykiss), 190 ug/L, 96H, Mortality

Persistence and Degradability:

In water sodium nitrite dissociates completely and under aerobic conditions the nitrite ions are oxidized to nitrates.

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: Corrosive solid, basic, inorganic, n.o.s.(Sodium Metasilicate)

DOT Hazard Class: 8 CORROSIVE

UN/NA Number: UN3262

Packing Group: III



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)
6834-92-0	Sodium metasilicate	No	No	No
60864-33-7	Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[(1,1,3,3-tetramethylbutyl)phenoxy]-	No	No	No
7632-00-0	Sodium nitrite	No	Yes 100 LB	Yes

10101-89-0	Phosphoric acid, trisodium salt, dodecahydrate	No	Yes 5000 LB	No
7758-29-4	STPP	No	Yes 5000 LB	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
6834-92-0	Sodium metasilicate	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
60864-33-7	Poly(oxy-1,2-ethanediyl), .alpha.-(phenylmethyl)-.omega.-[[1,1,3,3-tetramethylbutyl)phenoxy]-	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
7632-00-0	Sodium nitrite	CWA NPDES: No; TSCA: Yes - Inventory, 12(b); CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: Yes - 2258; NY Part 597: Yes: HS; PA HSL: Yes - E
10101-89-0	Phosphoric acid, trisodium salt, dodecahydrate	CWA NPDES: No; TSCA: No; 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
7758-29-4	STPP	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: No; PA HSL: Yes - E

16. OTHER INFORMATION

Revision Date: 08/07/2019

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.