

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Code:** MORGAN-170-BULK  
**Product Name:** Resque Plus  
**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**

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



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

**GHS Hazard Phrases:** H302 - Harmful if swallowed.  
 H314 - Causes severe skin burns and eye damage.  
 H332 - Harmful if inhaled.

**GHS Precaution Phrases:** P264 - Wash hands thoroughly after handling.  
 P270 - Do not eat, drink or smoke when using this product.  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
 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.  
 P363 - Wash contaminated clothing before reuse.  
 P332+313 - If skin irritation occurs, get 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.  
 P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P315 - Get immediate medical advice/attention.

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

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

**Potential Health Effects (Acute and Chronic):**

**Inhalation:** Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma.

**Skin Contact:** Causes skin burns. Substance is rapidly absorbed through the skin. May cause severe burns with delayed tissue destruction. Causes redness and pain.

**Eye Contact:** Causes severe eye burns. Eye damage may be delayed. Causes redness and pain. May cause chemical conjunctivitis and corneal damage.

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
6834-92-0	Sodium metasilicate	< 5.0 %
NA	Surfactant	<10.0 %
1310-58-3	Potassium hydroxide	<10.0 %
111-76-2	Glycol Ether EB	<10.0 %

### 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. Wash off with soap and plenty of water. Wash clothing before reuse. Consult a physician.

**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:** 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.

**Signs and Symptoms Of Exposure:** Burning sensation, Cough, Wheezing, Laryngitis, Shortness of breath.

**Note to Physician:** Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

### 5. FIRE FIGHTING MEASURES

**Flash Pt:** No data.

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

**Autoignition Pt:** No data.

**Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical 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.

## 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 product enter storm drains, storm sewers, watersheds or water systems unless authorized.
<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.

## 7. HANDLING AND STORAGE

<b>Precautions To Be Taken in Handling:</b>	Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapor or mist. Keep container tightly closed. Wash thoroughly after handling. Keep away from heat, sparks and flame.
<b>Precautions To Be Taken in Storing:</b>	Store in a cool, dry, well-ventilated area away from incompatible substances. Keep container closed when not in use. Store in a tightly closed container. Keep away from sources of ignition.
<b>Other Precautions:</b>	Handle in accordance with good industrial hygiene and safety practice.

## 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.
NA	Surfactant	No data.	No data.	No data.
1310-58-3	Potassium hydroxide	PEL: 2.0 mg/m <sup>3</sup>	CEIL: 2 mg/m <sup>3</sup>	No data.
111-76-2	Glycol Ether EB	PEL: 50 ppm	TLV: 20 ppm	No data.

<b>Respiratory Equipment (Specify Type):</b>	If airborne concentrations pose a health hazard or become irritating, use a NIOSH/MSHA-approved respirator, in the positive pressure mode.
<b>Eye Protection:</b>	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.
<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. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid	
<b>Appearance and Odor:</b>	No data available.	
<b>Melting Point:</b>	No data.	
<b>Boiling Point:</b>	No data.	
<b>Autoignition Pt:</b>	No data.	
<b>Flash Pt:</b>	No data.	
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.
<b>Specific Gravity (Water = 1):</b>	1.095 - 1.105	
<b>Vapor Pressure (vs. Air or mm Hg):</b>	No data.	
<b>Vapor Density (vs. Air = 1):</b>	No data.	
<b>Evaporation Rate:</b>	No data.	
<b>Solubility in Water:</b>	100%	
<b>pH:</b>	12.91 - 13.91	
<b>Percent Volatile:</b>	No data.	

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Unstable [ ] Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	Incompatible materials, ignition sources.
<b>Incompatibility - Materials To Avoid:</b>	Strong acids, Lead. Tin/tin oxides, Zinc, Acids, Strong oxidizing agents, Strong bases, aluminum.
<b>Hazardous Decomposition or Byproducts:</b>	formed under fire conditions. Sodium oxides, silicon oxides. oxides of potassium, hydrogen gas, Carbon monoxide.
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ] Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicological Information:</b>	<p>Epidemiology: No information found.  Teratogenicity: No information available.  Reproductive Effects: No information found.  Mutagenicity: No information found.  Neurotoxicity: No information found.</p> <p>CAS# NA: Surfactant: Acute toxicity, LD50, Oral, Rat, 960.0 - 3980. MG/KG. Result: Blood:Tumors. Immunological Including Allergic: Autoimmune (multiple organ involvement).  Acute toxicity, LD50, Dermal, Rabbit, 2000. - 2991. MG/KG. Result: Behavioral: Somnolence (general depressed activity). Vascular: BP lowering not characterized in autonomic section. Skin and Appendages: Skin: After topical exposure: Corrosive.  Acute toxicity, LD50, Inhalation, Rat, 1.150 MG/L, 4 H. Result: Lungs, Thorax, or Respiration:Other changes. Gastrointestinal:Nausea or vomiting.</p>
<b>Irritation or Corrosion:</b>	<p>Other Studies: CAS# 111-76-2:  Acute toxicity, LC50, Inhalation, Rat, 450.0 ppm, 4 H.  Acute toxicity, LD50, Oral, Rat, 470.0 mg/kg  Acute toxicity, LD50, Skin, Rabbit, 220.0 mg/kg</p>

Other Studies: CAS# 111-76-2:  
Standard Draize Test, Eyes, Species: Rabbit, 100.0 mg, 24 H

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# 6834-92-0:  
Acute toxicity, LD50, Oral, Rat, 1000 mg/kg

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

**Carcinogenicity/Other Information:**

Carcinogenicity.

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.

CAS# 1310-58-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 111-76-2: ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans.

California: Not listed.

NTP: Not listed.

IARC: Not listed.

**Carcinogenicity:**

NTP? No      IARC Monographs? No      OSHA Regulated? No

**12. ECOLOGICAL INFORMATION**

**General Ecological Information:**

Environmental: TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67,, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.

Physical: No information found.

Other: An estimated BCF value of 2.5,, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low, according to a recommended classification scheme.

CAS# NA: Surfactant: LC50, Fathead Minnow (*Pimephales promelas*), 3.800 - 6.200 MG/L, 96 H. Result: Affected fish stopped schooling behavior. Affected fish became hyperactive. Fish were overreactive to external stimuli. Affected fish swam at or near surface. No loss of equilibrium observed.  
LC50, Water Flea (*Daphnia magna*), 9.300 - 21.40 MG/L, 48 H. Result: Affected fish stopped schooling behavior. Affected fish became hyperactive. Fish were overreactive to external stimuli. Affected fish swam at or near surface. No loss of equilibrium observed.

**Results of PBT and vPvB assessment:**

Other Studies: CAS# 111-76-2:  
LC50, Water Flea (*Daphnia magna*), 1720 mg/l, 24 H, Intoxication  
LC50, Common Shrimp, Sand Shrimp (*Crangon crangon*), 775000 ug/l, 96 H, Mortality  
LC50, Amphipod (*Chaetogammarus marinus*), young organism(s), 1000 mg/l, 24 H, Mortality  
LC50, Carp (*Leuciscus idus ssp. melanotus*), 1575 mg/l, 48 H, Mortality  
Effective concentration to 0% of test organisms, Blue-Green Algae (*Microcystis aeruginosa*), 156000 ug/L, Population

**Persistence and Degradability:** No data available.  
**Bioaccumulative Potential:** No data available.  
**Mobility in Soil:** No data available.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Observe all federal, state, and local environmental 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. Contact a licensed professional waste disposal service to dispose of this material.

**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)
6834-92-0	Sodium metasilicate	No	No	No
NA	Surfactant	No	No	No
1310-58-3	Potassium hydroxide	No	Yes 1000 LB	No
111-76-2	Glycol Ether EB	No	No	Yes-Cat. N230

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
6834-92-0	Sodium metasilicate	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
NA	Surfactant	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
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
111-76-2	Glycol Ether EB	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 - 0275; NY Part 597: No; PA HSL: Yes - 1

## 16. OTHER INFORMATION

**Revision Date:** 10/21/2014

**Hazard Rating System:**



**Additional Information About This Product:** No data available.

**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.