

MATERIAL SAFETY DATA SHEET

Emergency Telephone (262) 251-4977

Name: **Alliance Group, Inc.** Address: N114 W18621 Clinton Drive
City: Germantown State: Wisconsin Zip Code: 53022
Product name: **Rustoscale #19**
Product code: **0128**

Section II Composition/Information on Ingredients

| ITEM | CAS Number | Chemical Component | % | OSHA Hazard |
|------|------------|--------------------|-----|-------------|
| 01 | 1310-73-2 | Sodium Hydroxide | <10 | YES |

Section III Hazard Identification

Emergency Overview: DANGER! CORROSIVE. Causes severe burns to eyes, skin and respiratory tract. Not Flammable, but reacts with most metals to form explosive/flammable hydrogen gas. Harmful or fatal if swallowed. Do not get in eyes, on skin or on clothing. Harmful or fatal if inhaled. Avoid breathing mist or dust. Use with adequate ventilation. DANGER! May react violently with water.

Potential Health Effects

Routes of Exposure: Eyes, Ingestion, Inhalation, Skin

Target Organs: Eyes. Skin. Respiratory System.

Eyes: Corrosive-Causes severe irritation and burns.

May cause: Pain. Permanent eye damage. Blindness. Corneal damage. Mist may

cause: Irritation. High vapor concentration may cause: tissue destruction.

Effects may vary depending on length of exposure, solution concentration and first aid measures.

Skin: Corrosive-Causes severe irritation and burns. Corrosive action causes burns and frequently deep ulceration with ultimate scarring. Note that irritation may follow an initial latency. The latency may vary as much as hours for dilute solutions to minutes for more concentrated solutions. Prolonged or repeated contact, even with dilute concentrations, can cause a high degree of tissue destruction. Large amounts may cause redness and swelling.

Ingestion: Corrosive-Causes severe irritation and burns.

May cause damage to the: mouth. Esophagus. Stomach. May be fatal if swallowed.

Ingestion can cause severe burns and complete tissue perforation of the mucous membranes of the mouth, throat and stomach. May cause: Abdominal pain. Nausea. Vomiting. Gastrointestinal disturbances.

Inhalation: Corrosive-Causes severe irritation and burns.

Dust or mist may cause damage to the: upper respiratory tract. Lungs. May cause: shortness of breath. Wheezing. Chest Pain. Pneumonitis. Choking. Impaired lung function. May irritate: nose. Mouth. Throat. Respiratory tract.

Skin Absorption: No absorption hazard expected under normal use.

Medical Conditions Aggravated by Exposure to Product:

Skin disorders. Lung disorders. Cardiovascular disorders. Eye disorders.

Other: None known

Carcinogenic Ingredients: OSHA: NO NTP: NO IARC: NO

Section IV First Aid Measures

First Aid Procedure - Never give fluids or induce vomiting if patient is unconscious or having convulsions.

CALL A PHYSICIAN

Eyes: Immediately flush with large amounts of cool water for 15 minutes, holding lids apart. Tilt head to avoid contaminating unaffected eye. Get medical attention immediately. Washing within one minute is essential to achieve maximum effectiveness.

Skin: Wash contaminated area with cool water for at least 15 minutes. Remove contaminated clothing and wash before reuse. Footwear cannot be decontaminated. Do not apply oils or ointments unless ordered by a physician. If skin feels slippery, caustic may still be present in sufficient quantities to cause rash or burn. Continue washing skin until slick feeling is gone. Get medical attention immediately.

Ingestion: Do not induce vomiting. If fully conscious give a quart of water. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. After dilution with water, fruit juice or diluted vinegar may be administered to accomplish neutralization. Several glasses of milk or several ounces of milk of magnesia may be given for their soothing effect.

Inhalation: Remove victim to fresh air. If breathing has stopped, resuscitate and administer oxygen if available. If breathing is difficult, give oxygen. Get medical attention immediately.

Section V Fire and Explosive Data

Flash Point: N/A Flammable Limits lfl:N/A ufl:N/A

Extinguishing Media: For fires in area use appropriate media. For example: Water Fog, Dry Chemical, Foam

Special Fire Hazards and Equipment Required: Wear full protective clothing and pressure-demand self-contained breathing apparatus in areas where product is stored. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. Avoid getting water spray into containers. Product generates heat upon the addition of water, with possible spattering. Run-off from fire control may cause pollution.

Fire and Explosion Hazards: Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas,

Hazardous Combustion Products: Hydrogen gas

Section VI Spill or Leak Control Procedures

Steps to be taken in case of spills: CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section VIII. Never exceed any occupational exposure limit. Leaks should be stopped. Spills should be contained and absorbed with an inert material (e.g. dry sand or earth), then placed in a properly labeled chemical waste container for disposal. All clean-up material should be removed and placed in approved containers, labeled and stored in a safe place to await proper treatment or disposal. Spills on areas other than pavement, e.g. dirt or sand may be handled by removing the affected soil or sand & placing in approved containers. Persons performing cleanup work should wear adequate personal protective equipment and clothing.

CAUTION: Caustic soda solution may react violently with acids and water.

Waste disposal methods: materials resulting from clean-up operations may be hazardous wastes and therefore subject to specific regulations. Package, store, transport, and dispose of all clean-up materials and any contaminated equipment in accordance with all applicable federal, state, and local health and environmental regulations. Shipments of waste materials may be subject to manifesting requirements per applicable regulations. Appropriate disposal will depend on the nature of each waste material and should be performed by competent and properly permitted contractors. Ensure that all responsible federal, state, and local agencies receive proper notification of spill and disposal methods

Section VII Normal Handling Procedures

Storage: CORROSIVE MATERIAL

Store in a secure, cool, dry area out of direct sunlight. Keep container tightly closed when not in use. Do not store near acids or metals (see incompatibility). Wear protective gear listed below when handling. Do not transfer to unlabelled containers. Wash thoroughly after handling. Do Not Get in Eyes, on Skin, or on Clothing.

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Add product very slowly while stirring constantly. If product is added too rapidly or without stirring and becomes concentrated at the bottom of the mixing vessel, excessive heat may be generated resulting in dangerous boiling and spattering and possible immediate violent irruption of highly caustic solution. Avoid dust or mist formation.

Section VIII Exposure Controls/Personal Protection

Engineering Controls: General room ventilation is required. To keep exposure below established limits, local exhaust may be necessary. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces.

Keep levels below exposure limits. To determine exposure levels monitoring should be performed regularly. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. If exposure limits are exceeded, wear: NIOSH-Approved respirator for dusts and mists. NIOSH-Approved self-contained breathing apparatus. Do not exceed limits established by the respiratory manufacture. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Protective Equipment:

Eyes: Chemical goggles, face shield. Do not wear contact lenses.

Gloves: Consult your glove manufacture for compatibility. Impervious gloves (rubber, neoprene. Polyvinyl chloride)

Other: Impervious protective clothing, apron, gauntlets, eye wash, safety shower, chemical safety shoes.

Ventilation Requirements: Adequate local exhaust ventilation

Hygienic Practices: Wash hands before eating and at the end of each shift. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Follow all MSDS/label precautions even after the container is emptied because they may retain product residues. Avoid contact with skin, eyes, and clothing.

| Exposure Guidelines | OSHA | ACGIH | | |
|---------------------|---------|-----------|-----------|-----------|
| Component | PEL | STEL/C | TWA | STEL/C |
| Sodium Hydroxide | 2 mg/m3 | Not Estab | Not Estab | C 2 mg/m3 |

Section IX Physical Data

| | | |
|---|-----------|------------------------|
| Solid: | Liquid: X | Appearance: dark brown |
| Specific Gravity: 1.1 | | odor: dull tannin odor |
| Solubility in water: complete | | pH: >12 |
| %Volatiles: N.D. | | Freezing Point: N.D. |
| Vapor Density: N.D. | | Evaporation Rate: N.D. |
| Boiling Range: N.D. | | |
| Coefficient of water/oil distribution: N.D. | | |

Section X Stability and Reactivity

Product Stable: No Yes X (Under normal conditions)
Hazardous Polymerization: will not occur (Under normal conditions)

Conditions to avoid: Heat, sparks and open flame. Product absorbs carbon dioxide from the air. Keep container closed and sealed. Contact with water may cause a violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product. Contact with acid or incompatible materials may cause a violent reaction with evolution of heat.

Incompatibility: Aluminum, tin, zinc, and their alloys, strong acids. strong oxidizers, phosphorus pentoxide, organic materials, organic nitro compounds, chlorinated hydrocarbons, fluorinated hydrocarbons, acetaldehyde, chlorine trifluoride, hydroquinone, maleic anhydride, tetrahydrofuran, acrolein, phosphorus, trichloroethylene, leather, wool. Food sugars. Deadly carbon monoxide gas may form in enclosed or poorly ventilated areas when alkaline products contact food, beverage, or dairy products. Do not enter such areas until they have been well ventilated and carbon monoxide and oxygen levels have been determined to be within OSHA acceptable limits.

Hazardous Decomposition Products: May liberate carbon monoxide or carbon dioxide. Hydrogen gas. Phosphine. Flammable dichloroacetylene.

Section XI Toxicological Properties

No product or component toxicological information is available.

Section XII Ecological Information

No information available

Section XIII Disposal Considerations

Follow all federal, state and local regulations

Hazardous Waste Number: D002

Dispose of in permitted hazardous waste management facility following all local, state, and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied.

Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.

Section XIIIIII Transportation Information

DOT Proper Shipping Name: Corrosive Liquid, Basic, Inorganic, NOS

DOT Technical Name: Sodium Hydroxide

DOT Hazard Class: Class 8

DOT UN/NA Number: UN3266 Packing Group II Resp. Guide Page: 154

Reportable Quantity (RQ): 1000 pounds (sodium hydroxide)

Section XV Regulatory Information

CERCLA-SARA Hazard Category:

This product has been reviewed according to the EPA Hazard Categories promulgated under section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard

Reactive Hazard

SARA Title III: Section 302/304/313/HAP

| No. | RQ (LBS) (*1) | RQ (LBS) (*2) | TPQ (lbs) (*3) | SEC 313 (*4) | HAP (*5) |
|------------------|------------------|------------------|-------------------|-----------------|-------------|
| Sodium Hydroxide | 1,000 | N/A | N.A. | No | No |

- *1 = Reportable quantity of CERCLA HAZARDOUS SUBSTANCE,
- *2 = SARA Reportable Quantity
- *3 = SARA EHS Threshold Planning Quantity
- *4 = SARA 313 Toxic Chemical/Category.
- *5 = U.S. EPA Hazardous Air Pollutant

Toxic Substance Control Act:

The chemical substances in this product are on the TSCA Section 8 Inventory or are exempt from TSCA Inventory reporting.

Section XVI Other Information

| | HMIS | NFPA | Key |
|--------------|------|------|-------------------------|
| Health | 3 | 3 | 0- minimal |
| Flammability | 0 | 0 | 1- slight |
| Reactivity | 1 | 1 | 2- moderate |
| Warning | N/A | N/A | 3- serious 4- severe |

MSDS Abbreviations: N.A. = Not Applicable N.D. = Not Determined
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound
C = Ceiling Limit
N.E. / Not Estab. = Not Established

Complies with CFR Title 21 Section 173.310 for boiler water and steam which may contact dairy products.

The above information is believed to be accurate and discloses the known hazards for this product as of this date. No additional warranties are made. date: September 26, 2002 By: D.C. Miller

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