

MATERIAL SAFETY DATA SHEET
Emergency Telephone (262) 251-4977

Section 1 – Company Name and Product Information

Company Name: Alliance Group, Inc.

Address: N114 W18621 Clinton Drive
State: Wisconsin

City: Germantown
Zip Code: 53022

Product name: **Rustoscale #186**

Product code: 0102

Chemical Family: Potassium Hydroxide Solution

Revised MSDS: 9/10/08

Replaces MSDS: 9/28/05

Section 2 – Hazards Identification

EMERGENCY OVERVIEW: DANGER! CORROSIVE – Causes severe burns. Harmful or fatal if swallowed. May cause an allergic reaction to skin, respiratory tract or if swallowed.

Physical State: Liquid
Color: Clear. Straw Yellow.
Odor: Slight amine odor.

POTENTIAL HEALTH EFFECTS

Routes of Exposure: Ingestion. Skin absorption. Inhalation. Eye contact.

Ingestion: May be corrosive to the digestive tract. Severe irritation and burns may result. Large amounts may cause: nausea. vomiting. diarrhea. irritation of mouth and throat. abdominal discomfort. Burns of mouth, throat, and stomach. Complete tissue perforation of mucous membranes of the mouth, throat, esophagus, and stomach.

Skin: May be corrosive to skin. Material may cause severe burns or irritation to skin.

Inhalation: May be corrosive to the respiratory tract. Severe irritation and burns may result. May cause: pneumonitis. pulmonary irritation. allergic reaction in some individuals.

Eye contact: May be corrosive to the eyes. Severe irritation and burns may result. If left untreated, may cause: chemical burns. corneal edema. permanent eye injury.

Chronic Effects Of Overexposure: Causes burns to exposed tissue. Dermatitis

Section 3 – Composition / Hazardous Ingredients

<u>CAS Number</u>	<u>Component</u>	<u>% by Weight</u>	<u>OSHA Hazard</u>
1310-58-3	Potassium Hydroxide	< 9%	NO
110-91-8	Morpholine	< 9%	YES
497-19-8	Soda Ash Dense	< 9%	NO
7757-83-7	Sodium Sulfite	> 9%	NO

Section 4 – 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 plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion: Do not induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep airway clear. Give plenty of water or, if available, milk to drink.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention if breathing becomes difficult or respiratory irritation occurs.

Note to Physician: Treatment otherwise is symptomatic and supportive, with attention to the possible complications of glottal obstruction, esophageal perforation and shock.

Section 5 – Fire Fighting Measures

Flash Point (TCC): N.E.

Lower Explosion Limit % By Volume (In Air): > 1.8

Extinguishing Media: For fires in area use appropriate media. For example: Water spray. Dry chemical. Carbon dioxide. Universal-type foam.

Fire Fighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-Approved self-contained breathing apparatus. Water spray (fog) may reduce intensity of flames.

Fire and Explosion Hazards: None known.

Section 6 – Accidental Release Measures

Steps to be taken in case of spill: Collect large spills for disposal. Flush small spills with water. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

Waste Disposal: Incineration in accordance with all federal, state, and local regulations. Dispose of spilled, neutralized, or waste product, contaminated soil and other materials in accordance with regulations.

Section 7 – Handling and Storage

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.

Storage: Store in a cool, dry, ventilated area. Keep container tightly closed when not in use. Keep away from incompatible materials. Do not store in unlabeled or mislabeled containers.

Section 8 – Exposure Control / Protective Equipment

Exposure Guidelines:

Component	Vapor Pressure	TLV	PEL
Potassium Hydroxide	Not Estab.	2 mg/m ³	Not Estab.
Morpholine	7.0	20 ppm	20 ppm
Soda Ash Dense	0.0	Not Estab	Not Estab
Sodium Sulfite	Not Estab.	Not Estab.	Not Estab.

PROTECTIVE EQUIPMENT:

Engineering Controls: General room ventilation to maintain vapor levels below TLV is expected. Special, local ventilation is needed at points where vapors or mists escape into workplace area.

Eyes / Face: Wear chemical safety goggles while handling this product. Do not wear contact lenses.

Skin: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Consult the glove manufacturer for the most appropriate glove material.

Other Protective Equipment: Eye wash station. Safety shower.

Respiratory Protection: If vapors are present, use a MESA or NIOSH-Approved respirator for organic vapors, fresh air breathing apparatus or a self-contained breathing apparatus. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

General Hygienic Practices: Wash with soap and water before eating and at the end of each work shift. Remove contaminated clothing and wash before reuse. Do not eat, drink, or smoke in work area.

Section 9 – Physical and Chemical Properties

Physical State:	Liquid
Color:	Clear. Straw Yellow.
Odor:	Amine.
Specific Gravity:	1.22 at 25°C
Solubility in Water:	Complete
Boiling Point:	212-271°F
Vapor Density:	Heavier than Air
Evaporation Rate:	Slower than Ether
% Volatiles:	79%

Section 10 – Stability and Reactivity

Stability: Product stable under normal conditions

Hazardous Polymerization: Will not occur under normal conditions

Conditions to avoid: Heating the product to its decomposition temperature.

Incompatible Materials: Strong Acids. Strong oxidizing agents. Aluminum, tin, zinc, and their alloys. Leather.

Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide. Sulfur dioxide. Ammonia.

Section 11 – Toxicological Information

No product or component toxicological information is available at this time.

Section 12 – Ecological Information

Ecotoxicological Information: No data available.
Chemical Fate Information: No data available.

Section 13 – Disposal Considerations

Hazardous Waste Number: N.A.

Disposal Method: Dispose of in accordance with all federal, state and local regulations. Since emptied containers retain product residue, follow all label warnings even after container is emptied.

Section 14 – Transportation Information

DOT (Department of Transportation):

Proper Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
(CONTAINS POTASSIUM HYDROXIDE, MORPHOLINE)

Hazard Class: 8

Identification Number: UN3266

Packing Group: II

Label Required: CORROSIVE

Section 15 – Regulatory Information

U.S. FEDERAL REGULATIONS

TSCA Inventory Status: This product or all components of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

SARA Title III Information Section 311/312 Category:

Immediate (Acute) Health Hazard: Yes
Delayed (Chronic) Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

SARA Section 302/304/313/HAP:

Component	CERCLA RQ	SARA RQ	SARA TPQ	SARA 313	U.S. HAP
Potassium Hydroxide	N.A.	N.A.	N.A.	NO	NO
Morpholine	N.A.	N.A.	N.A.	NO	NO

U.S. STATE REGULATIONS

California: The following components are listed under Proposition 65: No data available.

Wisconsin: The following components are listed as Wisconsin HAP: No data available.

Section 16 – Additional Information

MSDS Abbreviations

N.A. - Not Applicable
N.E. - Not Established
N.D. - Not Determined

HMIS/NFPA label information

	HMIS	NFPA	KEY
Health	2	2	0 = minimal
Flammability	0	0	1 = slight
Reactivity	1	1	2 = moderate
			3 = serious
			4 = severe

The above information is believed to be accurate and discloses the known hazards for this product as of this date. However, since conditions of use are outside our control it should not be taken as warranty or representation for which Alliance Group, Inc. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.

MSDS Prepared by: P. May