

MATERIAL SAFETY DATA SHEET
emergency telephone (262) 251-4977

Section I - Chemical Product and Company Identification

Name: **Alliance Group, Inc.** Address: N114 W18621 Clinton Drive
City: Germantown State: Wisconsin Zip Code: 53022
Product name: **Unitreat #16**
Product code: 0141

Section II - Composition/Information on Ingredients

| Chemical Component | CAS Number | % | OSHA Hazard |
|--------------------|------------|-----|-------------|
| Sodium Nitrite | 7632-00-0 | <10 | Yes |
| Sodium hydroxide | 1310-73-2 | <5 | Yes |
| Sodium Carbonate | 497-19-8 | <5 | Yes |

Section III - Hazards Identification

Physical State: Liquid
Color: Clear. Colorless
Odor; No Odor

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. May be harmful or fatal if inhaled. DANGER! May react violently with water. Contains oxidizer. May ignite organic materials and react with other materials.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:

Eyes. Skin. Inhalation. Ingestion.

Target Organs:

Eyes. Skin. Respiratory System.

Eye Contact: CORROSIVE-Causes severe irritation and burns. Corneal injury may occur. May cause: permanent eye damage. Blindness. 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. Contact may cause: redness. swelling. 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.

Skin Absorption: No absorption hazard expected under normal use.

Inhalation: CORROSIVE-Causes severe irritation and burns. May cause: shortness of breath. Wheezing. Chest pains. Pneumonitis. Choking. Impaired

lung function. Harmfull if inhaled. Dust or mist may cause damage to the: upper respiratory tract. Lungs. Inhalation of large amounts of mist may cause: central nervous system effects. Visual disturbances. Mental disturbance.

Ingestion: CORROSIVE-Causes severe irritation and burns. Ingestion can cause severe burns and complete tissue perforation of the mucous membranes of the mouth, throat and stomach. May be fatal if swallowed. May cause: nausea, vomiting, diarrhea. Moderate amounts may cause: weakness. Methemoglobin formation. Cyanosis. Convulsions. Collapse. Coma. Intentional ingestion of high doses of sodium nitrite have been reported to produce salivation, vomiting, burning sensation, severe pain, metabolic acidosis, blindness and even death.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE TO PRODUCT: Skin disorders. Respiratory system disorders. Lung disorders. Cardiovascular disorders. Eye disorders.

OTHER: Chronic exposure to nitrites may cause headaches, visual problems, and decreased blood pressure. Nitrites may react with secondary and tertiary amines to form nitrosamines, which are animal carcinogens. Due to the possibility of nitrosamines formation, sodium nitrite is not to be used in metal working fluids containing amines.

Carcinogenic Ingredients: This product does not contain greater than 0.1% of the known or potential carcinogens listed in OSHA, NTP, or IARC.

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: Flush with large amounts of cool water for 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Skin: Immediately wash off with water for 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing and shoes before reuse. DO NOT apply oils or ointments unless ordered by a physician. Discard footwear which cannot be decontaminated. If skin is still slippery, caustic may still be present in sufficient quantities to cause rash or burn. Continue washing until slick feeling is gone.

Ingestion: DO NOT INDUCE VOMITING. Give victim a quart of water if fully conscious. Call a physician immediately if unconscious or in convulsions, take immediately to a hospital or a physician. Never give fluids or induce vomiting if patient is unconscious. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Several glasses of milk or several ounces of milk of magnesia may be given for their soothing effect. DO NOT give carbonated beverages or weak acids such as vinegar.

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get Immediate Medical Attention.

NOTE TO PHYSICIAN: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Sodium nitrite forms methemoglobin in the blood. Treat accordingly.

Section V - Fire Fighting Measures

Flash Point: N/A Flammable Limits lfl: N/A ufl: N/A
Autoignition temperature: Not Determined
Extinguishing Media: CO2, foam, water fog, **Do Not Use dry chemical extinguisher containing ammonium compounds.**

Fire Fighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers, but avoid getting water into containers. Product generates heat upon 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 hydrogen gas. Material does not burn but contains an oxidizing agent and may support combustion of other materials. Contact with organic or combustible materials may cause fire.

Hazardous Combustion Products: Carbon dioxide, sodium oxide, hydrogen gas. At elevated temperatures, product will decompose generating: Nitrogen oxides.

Section VI- Accidental Release Measures

Steps to be taken in case of spills: CORROSIVE MATERIAL: Evacuate unprotected personnel from area. Wear protective gear(see Sec. VIII). Never exceed any occupational exposure limit. Contain spill, collect spill and store in labeled, approved drums for disposal. Avoid runoff into storm sewers and ditches which lead to waterways. Notify authorities if entry occurs. Follow all government regulations. CAUTION: Sodium hydroxide may react violently with acids and water.

Section VII - Handling and Storage

STORAGE:

Precautions to be taken in handling and Storage: CORROSIVE MATERIAL: Store in a secure, dry, clean area out of direct sunlight and away from heat. Keep container tightly closed when not in use. Do not store in unlabeled or mislabeled drums. Do not use aluminum equipment for storage and/or transfer. Highly corrosive to most metals with evolution of hydrogen gas. Do not freeze. Avoid contact with combustible materials, wood, and organic materials. Do not store near feed or food, or near extreme heat. Wash thoroughly after handling. Avoid excessive heat.

HANDLING:

Wash thoroughly after handling. Do not get in eyes, on skin, or on 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. CORROSIVE MATERIAL: Avoid dust or mist formation. 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.

Section VIII - Exposure Control/Personal Protection

Protective Equipment:

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

Gloves: Impervious gloves. Consult your glove manufacture for compatibility.

Other: Rubber Apron, Gauntlets, Eye wash, Safety shower

Ventilation Requirements: General room ventilation and local exhaust are required. 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 preformed regularly.

Respiratory Protection: Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-approved respirator for dust and mist. NIOSH approved self-contained breathing apparatus. DO not exceed limits established by the respirator 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.

Hygienic Practices: Wash hands before eating. 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 contain product residues. Avoid prolonged and repeated contact with the skin. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical.

EXPOSURE GUIDELINES

| COMPONENT | OSHA | | ACGIH | |
|------------------|---------|--------|-------|-----------|
| | PEL | STEL/C | TWA | STEL/C |
| Sodium Nitrite | N.E. | N.E. | N.E. | N.E. |
| Sodium Hydroxide | 2 mg/m3 | N.E. | N.E. | C 2 mg/m3 |
| Sodium Carbonate | N.E. | N.E. | N.E. | N.E. |

Note: N.E. = Not Established

C = Denotes Ceiling Limit

Section IX-Physical and Chemical Properties

| | | | |
|----------------------|-----------|-----------------|------------------|
| Solid: | Liquid: X | Appearance: | Clear, colorless |
| Specific Gravity: | 1.09 | Odor: | None |
| Solubility in water: | Complete | Freezing Point: | 32 F |
| % Volatiles: | N.D. | pH: | 13.6 as is |
| Vapor Density: | N.D. | Boiling Range: | 212 - 293 F |
| Evaporation Rate: | N.D. | | |
| Odor Threshold: | N.A. | | |

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. 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. Solutions are oxidized by air.

Incompatibility: Acids, Fluorine, Lithium, Aluminum, Steel, Magnesium, Phosphorus pentoxide, 2,4,6 Trinitrotoluene. Combustible material. Cyanides. Sulfites. Metabisulfites. Amines. Reducing agents. Wool. Food sugars, deadly carbon monoxide gas can form in enclosed or poorly ventilated areas or tanks when alkaline products contact food, beverages, 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. If carbon monoxide and oxygen levels cannot be measured wear NIOSH approved self contained breathing apparatus. Metals such as, aluminum, zinc, tin, etc.. Organic materials. Organic nitro compounds. Chlorinated hydrocarbons. Fluorinated hydrocarbons. Acetaldehyde. Chlorine trifluoride. Hydroquinone. Maleic anhydride. Tetrahydrofuran. Acrolein. Phosphorous. Trichloroethylene. Leather. Ammonium compounds. Flammable materials. Water-reactive substances.

Hazardous Decomposition Products: Sodium oxide. CO. CO2. Ammonia. Nitrogen oxides at elevated temperatures. May react with certain metals to produce flammable hydrogen gas. Reacts with phosphorus to form spontaneously flammable phosphine. Reacts with Trichloroethylene to form spontaneously flammable dichloroacetylene.

Section XI - Toxicological Properties

No product or component toxicological information is available.

Section XII - Ecological Information

Ecological Information: Extensive data on individual chemicals, call for information.

Section XIII - Disposal Information

Hazardous waste number: D002

Disposal Method: DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of. Toxic fumes may be given off when material is exposed to fire. Follow all federal, state and local regulations. Since empty container retain product residues, follow label warnings even after container is emptied.

Section XIII - Transportation Information

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

DOT Technical Name: Sodium Hydroxide, Sodium Nitrite

DOT Hazard Class: Class 8

DOT UN/NA Number: UN3266 Packing Group: II

Reportable quantity (RQ): 100# Sodium Nitrite 1000# Sodium Hydroxide

Section XV - Regulatory Information

U.S. Federal Regulations: As follows

OSHA: Hazardous by definition of Hazardous Communication Standard (29 CFR 1910.1200)

SARA TITLE III SECTION 311/312 CATEGORY:
 IMMEDIATE (ACUTE) HEALTH HAZARD: YES
 DELAYED (CHRONIC) HEALTH HAZARD: YES
 FIRE HAZARD: NO
 SUDDEN RELEASE OF PRESSURE HAZARD: NO
 REACTIVE HAZARD: YES

SARA SECTION 302/304/313/HAP:

| COMPONENT | RQ (LBS) (*1) | RQ (LBS) (*2) | TPQ (LBS) (*3) | SEC 313 (*4) | HAP (*5) |
|------------------|------------------|------------------|-------------------|-----------------|-------------|
| Sodium Nitrite | 100 | N.A. | N.A. | YES | NO |
| Sodium Hydroxide | 1000 | N.A. | N.A. | NO | NO |
| Sodium Carbonate | N.A. | N.A. | N.A. | NO | NO |

----- FOOTNOTES -----

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

STATE REGULATIONS:

CALIFORNIA--The following components are listed under Prop 65:
 This product may contain a detectable levels of (a) chemical(s)
 subject to California's Proposition 65.

WISCONSIN--The following components are listed as a Wisconsin HAP:
 Sodium Hydroxide

Section XVI - Other Information

| | HMIS RATING | NFPA Rating |
|-------------------------------|-------------|------------------------|
| HEALTH | 3 | 3 |
| FLAMMABILITY | 0 | 0 |
| REACTIVITY | 1 | 1 |
| * = Chronic Health Hazard | | Special Hazard: None |
| Legend: N.A. - Not Applicable | | N.E. - Not Established |
| N.D. - Not Determined | | |

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: November 26, 2002 By: D.C Miller