

MATERIAL SAFETY DATA SHEET

ALLIANCE GROUP, IN. ADDRESS: N114 W18621 CLINTON DRIVE CITY: GERMANTOWN
STATE: WI ZIP CODE: 53022 EMERGENCY NUMBER: 262-251-4977
PRODUCT NAME: UNITREAT 6 PRODUCT CODE: 0168 Revised: 11-07-2005 Replaces: 11-30-2001

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: UNITREAT 6
Chemical Family: Mixture
Formula: Alkaline Cleaner
Proprietary Information

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! CORROSIVE. Causes severe burns to eyes, skin, and respiratory tract. Harmful or fatal if swallowed. May be harmful or fatal if inhaled. Not flammable, but reacts with most metals to form explosive/flammable hydrogen gas. Contains oxidizer. May ignite organic materials and react with other materials.

Physical State: Liquid.
Color: Clear. Colorless to faint yellow.
Odor: No data available.

POTENTIAL HEALTH EFFECTS

Routes Of Exposure: Absorption. Eyes. Ingestion. Inhalation. Skin.

Target Organs: Eyes. Skin. Respiratory System.

Eye Contact: CORROSIVE-Causes severe irritation and burns. Small amounts may cause: permanent eye damage. blindness. corneal damage. Mist may cause: irritation. High mist concentrations may cause: tissue destruction. Effects may vary depending on length of exposure, solution concentration and first aid measures.

Skin Contact: 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 contact, even with dilute concentrations, can cause tissue destruction and permanent skin damage. Dust or mist from solutions can cause irritant dermatitis. Repeated exposure may cause: persistent irritation or dermatitis. Prolonged or repeated exposure may cause: allergic skin reaction in sensitive individuals.

Skin Absorption: May be absorbed through skin. Absorbed through damaged skin.

Inhalation: CORROSIVE-Causes severe irritation and burns. Inhalation of large amounts of mist may cause: central nervous system effects. visual disturbances. mental disturbances. May produce signs and symptoms of toxicity similar to those described for swallowing. Dusts or mists may irritate: nose. mouth. throat. respiratory tract. Dusts or mists may cause damage to the: upper respiratory tract. lungs. May cause: coughing. sneezing. running nose. sore throat. shortness of breath. wheezing. tightness of the chest. chest pain. choking. impaired lung function. pneumonitis. pulmonary edema.

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Ingestion: CORROSIVE-Causes severe irritation and burns. May cause damage to the: mouth. throat. stomach. gastrointestinal tract. 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: abdominal pain. nausea. vomiting. weakness. headache. diarrhea. bleeding. fall in blood pressure. shock. collapse. methemoglobin formation. cyanosis. convulsions. coma. death. gastrointestinal ulceration. Damage may appear days after exposure. Intentional ingestion of high sodium nitrate or sodium nitrite doses 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. Lung disorders. Cardiovascular disorders. Eye disorders. Respiratory system disorders.

Other: Nitrites may react with secondary and tertiary amines to form nitrosamines, which are animal carcinogens. However, in alkaline solutions, only trace amounts of nitrosamines occur. Since this product is an alkaline solution, nitrosamine formation should not pose a problem. Chronic exposure to nitrites may cause headaches, visual problems, and decreased blood pressure. This product contains one or more amines, which may produce temporary and reversible hazy or blurred vision. Symptoms disappear when exposure is terminated.

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

Potential Environmental Effects: See Section 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	OSHA Hazard	% by Wt.
Sodium Nitrite	7632-00-0	YES	< 10 %
Sodium Hydroxide	1310-73-2	YES	< 5 %
Sodium Carbonate	497-19-8	YES	< 5 %
Methoxypropylamine	5332-73-0	YES	< 5 %

4. FIRST-AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Washing eyes within several seconds is essential to achieve maximum effectiveness. Do not attempt to neutralize with chemical agents.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. 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. Do not apply oils or ointments unless ordered by the physician. Discard footwear which cannot be decontaminated. Discard contaminated leather articles such as shoes and belt.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure.

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Ingestion: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. If vomiting occurs spontaneously, keep airway clear and give more water.

Note to Physicians: Sodium nitrite forms methemoglobin in the blood stream. Treat accordingly. The absence of visible signs or symptoms of burns does not reliably exclude the presence of actual tissue damage. Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

Extinguishing Media: For fires in area use appropriate media. For example: Water spray. Carbon dioxide. Alcohol foam. 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 flammable hydrogen gas. Material does not burn but contains an oxidizing agent and may support combustion of other materials. Contact with organic or combustible material may cause fire.

Hazardous Combustion Products: Nitrogen oxides. Carbon dioxide. Sodium oxide. Ammonia. Carbon monoxide. Aldehydes. Ketones.

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Contain spill, place into drums for proper disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. CAUTION: This product may react violently with acids and water.

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.

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.

Storage: CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Avoid contact with combustible materials, wood and organic materials. Highly corrosive to most metals with evolution of hydrogen gas. Do not freeze.

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Deadly carbon monoxide gas can form in enclosed or poorly ventilated areas or tanks 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. If carbon monoxide and oxygen levels cannot be measured, wear NIOSH-approved, self-contained breathing apparatus.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Component	OSHA PEL	OSHA STEL/C	ACGIH TWA	ACGIH STEL/C
Sodium Nitrite	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Sodium Hydroxide	2 mg/m3	Not Estab.	Not Estab.	C 2 mg/m3
	Not Estab.	C 2 mg/m3+		
Sodium Carbonate	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Methoxypropylamine	Not Estab.	Not Estab.	Not Estab.	Not Estab.

Note: C = Denotes Ceiling Limit. + Vacated 1989 OSHA PEL(s).

Engineering Controls: General room ventilation and local exhaust are required. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly. NOTE: Where carbon monoxide may be generated, special ventilation may be required.

Eye/Face Protection: Wear chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant.

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 air-purifying respirator with: Dust/mist filter. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. 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.

Other Protective Equipment: Eye-wash station. Safety shower. Rubber apron. Rubber boots. Protective clothing.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Color: Clear. Colorless to faint yellow.

Odor: No data available.

Boiling Point (deg. F): N.D.

Freezing Point (deg. F): N.D.

Melting Point (deg. F): N.D.

Vapor Pressure (mm Hg): N.D.

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Vapor Density (air=1): N.D.
Solubility in Water: Complete
pH: >12 (as is)
Specific Gravity: 1.090 @25C
% Volatile (wt%): N.D.
Evaporation Rate (nBuAc = 1): N.D.
VOC (wt%): N.D.
VOC (lbs/gal): N.D.
Viscosity: N.D.
Flash Point: N.A.
Flash Point Method: N.A.
Lower Explosion Limit: N.A.
Upper Explosion Limit: N.A.
Autoignition Temperature: No Data

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions To Avoid: Avoid elevated temperatures. Solutions are oxidized by air.

Incompatible Materials: Acids. Reducing agents. Combustible materials. Organic materials. Cyanides. Sulfites. Metabisulfites. Ammonium compounds. Amines. Water-reactive substances. Metals such as aluminum, zinc, tin, etc. Magnesium. Chromium. Brass. Bronze. Copper. Lead. Other alkali sensitive metals or alloys. Organic nitro compounds. Chlorinated hydrocarbons. Fluorinated hydrocarbons. Acetaldehyde. Chlorine trifluoride. Hydroquinone. Maleic anhydride. Tetrahydrofuran. Acrolein. Phosphorous. Trichloroethylene. Leather. Wool. Phosphorous pentoxide. Halogenated compounds. Glycols. Explosives. Acrylonitrile. 1,2-Dichloroethylene. Tetrachloroethane. Organic peroxides. Sodium tetrahydroborate. Food sugars. Fluorine. Lithium. Steel. 2,4,6-Trinitrotoluene. Sulfuric acid. Soda ash and lime dust (calcium oxide) in the presence of moisture may form corrosive caustic soda. Strong oxidizing agents.

Hazardous Decomposition Products: Nitrogen oxides. Hydrogen gas. Carbon monoxide. Flammable dichloroacetylene. Phosphine. Sodium oxide. Carbon dioxide. Ammonia. Aldehydes. Ketones.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions. However, sodium hydroxide can induce hazardous polymerization of acetaldehyde, acrolein, and acrylonitrile. Contact with water may cause 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. May react with certain metals to produce flammable hydrogen gas. Contact with acids, halogenated organics, organic nitro compounds, glycols, or sodium tetrahydroborate may produce flammable hydrogen gas. Contact with 1,2-dichloroethylene, trichloroethylene, tetrachloroethane, or phosphorous can form spontaneously flammable chemicals. Reactions with various food sugars may form carbon monoxide. Reacts violently with acids. Acids can cause the formation of nitrogen oxides. Acids can cause the formation of carbon dioxide.

11. TOXICOLOGICAL INFORMATION

LD50 Oral: No Data
LD50 Skin: No Data
LC50 Inhalation: No Data

For detailed toxicological information on individual chemical components contained in this product, contact the address in Section 1 of this MSDS.

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12. ECOLOGICAL INFORMATION

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

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

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D002

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

14. TRANSPORTATION INFORMATION

DOT (Department of Transportation):

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

Hazard Class: 8

Identification Number: UN3266

Packing Group: II

Label Required: CORROSIVE

Reportable Quantity (RQ): 100# (Sodium Nitrite); 1000# (Sodium Hydroxide).

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 31 1/312 Category:

Immediate (Acute) Health Hazard: Y

Delayed (Chronic) Health Hazard: Y

Fire Hazard: N

Sudden Release Of Pressure Hazard: N

Reactive Hazard: Y

SARA Section 302/304/313/HAP:

Component	CERCLA RQ	SARA RQ	SARA TPQ	SARA 313	U.S. HAP
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
Methoxypropylamine	N.A.	N.A.	N.A.	NO	NO

U.S. STATE REGULATIONS

California - The following components are listed under Proposition 65:

This product may contain a detectable level of (a) chemical(s) subject to California's Proposition 65.

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

16. ADDITIONAL INFORMATION

Health: 3*
Flammability: 0
Reactivity: 1
* = Chronic Health Hazard

NFPA Rating System

Health: 3
Flammability: 0
Reactivity: 1
Special Hazard: None

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

MSDS Prepared by: NAO

Reason for Revision: Product formulation change. Changes made throughout the MSDS.

The data in this Material Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. 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.