

MATERIAL SAFETY DATA SHEET

VOLTREET

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Revised: 08-17-2005

Replaces: 4/16/2001

1. PRODUCT AND COMPANY IDENTIFICATION

Name: **Alliance Group, Inc.** Address: N114 W18621 Clinton Drive
City: Germantown State: Wisconsin Zip Code: 53022
Product name: **Voltreet** Product code: **0108** Phone: **1-800-648-7339**
CAS Number: Mixture Chemical Family: Alkanolamines Formula: Proprietary Information

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! CORROSIVE. Causes severe burns to eyes, skin, and respiratory tract. Harmful or fatal if swallowed. Aspiration may cause lung damage. Harmful if absorbed through skin. Harmful if inhaled. DO NOT add nitrites or other nitrosating agents - May form suspected cancer causing nitrosamines.

Physical State: Liquid
Color: Clear. Water white.
Odor: Amine.

POTENTIAL HEALTH EFFECTS

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

Target Organs: Eyes. Skin. Respiratory System. Central Nervous System. Liver. Kidneys.

Eye Contact: CORROSIVE-Causes severe irritation and burns. High vapor concentration or liquid contact may cause: marked excess redness. swelling. discomfort. blinking. tearing. pain. permanent eye damage. blindness. corneal edema. distortion of vision. optical halos. temporary foggy vision. Repeated exposure may cause: conjunctivitis. corneal clouding. cataracts. retinal atrophy. Exposure to the vapor may cause minor transient edema of the corneal epithelium. This condition, known as "glaucompsia", "blue haze", or "blue-gray haze" produces a blurring of vision against a general bluish haze and the appearance of halos around bright objects. This condition will disappear spontaneously within a few hours of the exposure and leaves no sequelae. Although not detrimental to the eye, skilled tasks such as driving a motorized vehicle should not be undertaken.

Skin Contact: CORROSIVE-Causes severe irritation and burns. Causes: inflammation. local redness. swelling. discomfort. pain. burns. Contact may cause: tissue destruction. fissures. ulceration. bleeding. sensitization. permanent injury. severe excess redness. blistering. dermatitis (inflammation of the skin).

Skin Absorption: Maybe harmful if absorbed through skin. Absorption may cause: nausea. headache. general discomfort. liver injury. kidney injury. lung injury.

Inhalation: May be corrosive to the respiratory tract. Severe irritation and burns may result. May irritate or burn: nose. throat. respiratory tract. Vapors or mists may cause: nasal discomfort and discharge. coughing. difficulty breathing. chest pain. headache. nausea. vomiting. dizziness. drowsiness. central nervous system effects. Prolonged or repeated contact may cause: sensitization. May cause damage to the: lungs. kidneys. liver. Aerosols and mists may cause: tissue damage. scarring. Prolonged or repeated overexposure may result in the absorption of potentially harmful amounts of material.

Ingestion: CORROSIVE-Causes severe irritation and burns. May cause burns to the: mouth. throat. esophagus.

MATERIAL SAFETY DATA SHEET

VOLTREET

stomach. May cause: abdominal discomfort. abdominal pain. chest pain. nausea. vomiting. diarrhea. dizziness. drowsiness. faintness. weakness. thirst. collapse. coma. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

Medical Conditions Aggravated By Exposure To Product: Skin disorders. Asthma. Eye disorders. Respiratory system disorders. Nervous system disorders. Inflammatory or fibrotic pulmonary disease. Bronchitis.

Other: DO NOT USE sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. 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

<u>Component</u>	<u>CAS Number</u>	<u>OSHA Hazard</u>	<u>% by Wt.</u>
Diethylethanolamine	100-37-8	YES	< 15 %
Morpholine	110-91-8	YES	< 10 %

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. Do not attempt to neutralize with chemical agents. Continue flushing for an additional 15 minutes if medical attention is not immediately available.

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. Discard contaminated leather articles such as shoes and belt. Discard footwear which cannot be decontaminated. Do not apply oils or ointments unless ordered by the physician. Do not attempt to neutralize with chemical agents.

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.

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.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water spray. Alcohol foam. Carbon dioxide. Dry chemical.

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 and disperse vapors. If container is not properly cooled, it can rupture in the heat of a fire. Run-off from fire control may cause pollution.

MATERIAL SAFETY DATA SHEET

VOLTREET

Fire And Explosion Hazards: Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Can release vapors that form explosive mixtures at temperatures at or above the flash point. This material may produce a floating fire hazard in extreme fire conditions.

Hazardous Combustion Products: Irritating and/or toxic gases. Carbon dioxide. Carbon monoxide. Nitrogen oxides. Ammonia.

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. Shut off source of leak if safe to do so. Eliminate all sources of ignition. Contain spill, place into drums for proper disposal. Soak up residue with non-flammable absorbent material. **DO NOT** use sawdust or other cellulose-type material. Place in non-leaking containers for immediate 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.

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. 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 SOURCE OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.** Bond and ground transfer containers and equipment.

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. Keep away from heat, sparks, and flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

<u>Component</u>	<u>OSHA PEL</u>	<u>OSHA STEL/C</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL/C</u>
Diethylethanolamine	10 ppm S	Not Estab.	2 ppm S 20	Not Estab.
Morpholine	20 ppm S	Not Estab.	ppm S	Not Estab.
	20 ppm S+	30 ppm S+		

Note: S = Skin notation. + Vacated 1989 OSHA PEL(s).

Engineering Controls: Local exhaust or other engineering controls are needed to minimize exposures. Use explosion-proof ventilation equipment. 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.

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: Impervious.

MATERIAL SAFETY DATA SHEET

VOLTREET

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 organic respirator. NIOSH-Approved air purifying respirator. 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. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Color: Clear. Water white.

Odor: Amine.

Boiling Point (deg. F): 212-326

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

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

Vapor Pressure (mm Hg): N.D.

Vapor Density (air=1): N.D.

Solubility in Water: Complete

pH: 11.7 (as is)

Specific Gravity: 0.996 @ 25C

Volatile (wt%): N.D.

Evaporation Rate (nBuAc = 1): N.D.

VOC (wt%): 10

VOC (lbs/gal): 0.83

Viscosity: N.D.

Flash Point: 212 Deg. F. (Water vapor extinguished test flame.)

Flash Point Method: TCC.

Lower Explosion Limit: ~1.8-6.7

Upper Explosion Limit: ~10.8-11.7

Autoignition Temperature: No Data

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions To Avoid: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. **WARNING:** Do not mix this product with nitrites or other nitrosating agents because a nitrosamine may be formed. Nitrosamines may cause cancer.

Incompatible Materials: Acids. Oxidizing agents. Sodium hypochlorite. Calcium hypochlorite. Nitrates. Perchlorates. Heat. Product slowly corrodes copper, aluminum, zinc, and galvanized surfaces. Isocyanates. Nitrites. Metals such as aluminum, zinc, tin, etc.

Hazardous Decomposition Products: Irritating and/or toxic gases. Carbon oxides. Nitrogen oxides. Ammonia.

MATERIAL SAFETY DATA SHEET

VOLTREET

Nitrogen oxide can react with water to form corrosive nitric acid.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. A reaction accompanied by large heat release occurs when the product is mixed with acids. Heat generated may be sufficient to cause vigorous boiling creating a hazard due to splashing or splattering of hot material.

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.

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: N.A.

Disposal Method: Dispose of in accordance with 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, ORGANIC, N.O.S. (CONTAINS DIETHYLETHANOLAMINE, MORPHOLINE)

Hazard Class: 8

Identification Number: UN3267

Packing Group: II

Label Required: CORROSIVE

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.

MATERIAL SAFETY DATA SHEET

VOLTREET

SARA Title III Section 311/312 Category:

Immediate (Acute) Health Hazard: Y

Delayed (Chronic) Health Hazard: Y

Fire Hazard: N

Sudden Release Of Pressure Hazard: N

Reactive Hazard: N

SARA Section 302/304/313/HAP:

Component	CERCLA RQ	SARA RQ	SARA TPQ	SARA 313	U.S.
Diethylethanolamine	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:

Ethylene glycol monomethyl ether (Trace)

Wisconsin - The following components are listed as a Wisconsin HAP:

2-Diethylaminoethanol.

16. ADDITIONAL INFORMATION

NFPA Rating System

Health: 3

Flammability: 1

Reactivity: 0

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: DCM

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.