

MATERIAL SAFETY DATA SHEET
OSHA Hazard Communication Standard
29 CFR 1910.1200

Section I

Product Name: VANGUARD	Manufactured By: Taylor Laboratories, Inc.
Product Code: DI-1392	Address: P.O. Box 15146, Chattanooga, TN 37415
Chemical Family: Germicidal Cleaner and Deodorizer	Business Phone: 423-267-5601
Chemical Formula: Mixture	Emergency Phone: 423-267-5601
MSDS Revision Date: 12/28/98	Distributed By: NORTH GEORGIA PAPER
	Address: PO BOX 1507, BLUE RIDGE, GA 30513
	Business Phone: (706) 632-2055
	Emergency Phone: (706) 632-2055

Department of Transportation Federal Motor Carrier Hazardous Material Shipping Regulations

Proper Shipping Name: Not regulated	Hazard Classification: Not regulated
Identification Number: Not regulated	For Transportation Emergencies, Call: Chemtrec 1-800-424-9300

Section II - Hazardous Ingredients/Identity Information

HAZARDOUS COMPONENT	CAS NUMBER	OSHA PEL	ACGIH TLV	COMMENTS
Chelating agents 2-Butoxyethanol	N/A 111-76-2	N.E. 25 ppm	N.E. 25 ppm	Eye Irritation Hazard SARA Title 313

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals appearing in 40 CFR 372 (Section 313). Section 313 information must be included in all MSDS's that are copied and distributed to end-users. For help and additional information concerning Title III call the EPA Hotline at 1-800-535-0202.

Section 313 Component	Percent	Section 313 Component	Percent
2-Butoxyethanol	1.0 - 3.0 %		

Section III - Physical/Chemical Characteristics

Boiling Point: 212 degrees F	Vapor Pressure (mm Hg): N/A	Summary of Hazard Rating (HMIS)		
Freezing Point: N/A	Vapor Density: N/A	Hazard	Rating	Key
pH (1%): 8.72	Evaporation Rate: N/A	Health:	2	0-Minimal 3-High
Solubility in Water: Excellent	Specific Gravity (H2O=1): 1.009	Fire and explosion:	0	1-Slight 4-Extreme
Appearance and Odor: Translucent, blue liquid with a fresh floral odor.		Reactivity:	0	2-Moderate

Section IV - Fire and Explosion Data

Flash Point (method): Not combustible	Flammable Limits in Air, % by Vol.	LEL N/A	UEL N/A
Extinguishing Media: Use appropriate media for surrounding structures and containers.			
Special Fire Fighting Procedures: As with all chemical fires, wear a self-contained breathing apparatus in confined areas or where smoke or fumes can drift or accumulate.			
Unusual Fire and Explosion Hazard: N/A			

Section V - Reactivity Data

Stability (unstable/stable): Stable	Hazardous Polymerization: Will not occur
Stability Conditions to Avoid: High temperatures	
Incompatibility (Materials to Avoid): N/A	
Hazardous Decomposition or By-products: Oxides of carbon and nitrogen may form upon thermal decomposition.	

Section VI - Health Hazard Data

Threshold Limit Value: Not-established

Route(s) of Entry: Inhalation? No Skin? No Ingestion? Yes

Health Hazards-Acute: EYES-May cause irritation. INGESTION-May cause gastrointestinal irritation, vomiting, nausea, diarrhea. SKIN-Causes irritation or defatting of the skin; prolonged exposures may allow 2-Butoxyethanol to be absorbed resulting in possible hemoglobinuria. INHALATION-May cause irritation to nose, throat, mucous membranes. Severe exposures can cause hemolysis (destruction of red blood cells).

Health Hazards-Chronic: N/A

Carcinogenicity: Not carcinogenic OSHA Regulated? Not carcinogenic NTP? Not carcinogenic

Effects of Overexposure: Causes irritation to skin, eyes, mucous membranes, digestive system, and respiratory system. Prolonged air exposures of 2-Butoxyethanol above the OSHA permissible exposure limit or prolonged skin contact may cause blood, kidney, and/or liver damage.

Emergency and First Aid Procedures:

Ingestion (swallowing): DO NOT INDUCE VOMITING! Drink large quantities of clear water or milk. If vomiting occurs, keep head below hips to prevent breathing of liquid into the lungs (aspiration hazard). Call a physician immediately.

Skin Contact: Flush exposed area for at least 15 minutes if irritation develops. Apply skin lotion if defatting occurs. Seek medical attention if irritation persists.

Eye Contact: Flush eyes with water for at least 15 minutes being careful to flush areas behind the eyelids. Seek medical attention if irritation persists or develops.

Section VII - Spill or Leak Procedures

Steps To Be Taken In Case Material Is Released or Spilled: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Waste Disposal Method: This material is regulated under SARA Title III. Follow all local, state, and federal regulations to ensure proper and responsible disposal of this product.

Section VIII - Special Protection Information

Respiratory Protection (specify type): Maintain general ventilation as required for normal plant operation.

Ventilation: Maintain general ventilation as required for normal plant operation.

Local Exhaust: Maintain general ventilation and exhaust for normal plant operation.

Mechanical (general): Maintain general ventilation for normal plant operation.

Protective gloves: Wear rubber or vinyl gloves for prolonged exposures.

Eye Protection: Wear approved glasses or goggles if eye contact is possible.

Other Protective Equipment: N/A

Section IX - Special Precautions

Precautions To Be Taken in Handling and Storage: Avoid contact with eyes, skin, and clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing thoroughly before reuse.

Other precautions: Keep out of reach of children.

Section X - User Responsibility

The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.