

MATERIAL SAFETY DATA SHEET

(COMPLIES WITH 29CFR 1910.1200)

SECTION I - CHEMICAL PRODUCT & COMPANY IDENTIFICATION			
Identity (As Used on Label and List): Tornado Degreaser (TOR110)			
Product Class: Water-based Degreaser			
Emergency Telephone Number: 800-535-5053			
Telephone Number for Information: 763-509-7937			
Manufacturer's Name and Address: Ver-tech Labs 6801 Bleck Drive Rockford, MN 55373			
SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS			
Hazardous Components (Specific Chemical Identity):			
Chemical	Common Name(s)		
A	2-Butoxy ethanol CAS #111-76-2		
B	Sodium hydroxide CAS #1310-73-2		
SECTION III - HAZARDS IDENTIFICATION			
Emergency Overview			
Appearance and Odor: Yellow liquid, citrus aroma.			
Primary Hazards: Corrosive			
Potential Health Hazards			
Route(s) of Entry: Skin Absorption: X Ingestion: X Inhalation: X			
Eye: May cause chemical burns on contact.			
Skin: May cause chemical burns on contact.			
Ingestion: May be harmful if swallowed.			
Inhalation: Overexposure to butyl vapors may be harmful.			
Signs and Symptoms of Exposure: Eye Contact: Possible burning, tearing, redness and corneal damage. Skin Contact: Possible slippery feeling, redness, swelling and burns. Symptoms may be delayed. Inhalation: Overexposure to 2-Butoxy ethanol (butyl) vapors may cause central nervous system effects including drowsiness, headache, nausea and dizziness.			
Carcinogenicity: NTP? No IARC Monographs? No			
OSHA Regulated? No			
Target Organ (s): Eyes, skin, liver, kidneys, lymphoid system, respiratory system and blood.			
Medical Conditions Generally Aggravated by Exposure: N. Av.			
Health Hazards, Chronic: Overexposure to 2-Butoxy ethanol may cause damage to one or more of the target organs listed above.			
SECTION IV - FIRST AID MEASURES			
Emergency and First Aid Procedures:			
For Eye Contact: Immediately flush eyes with sanitary eye wash solution or running water for at least 15 minutes. Obtain medical attention. Continue to flush eyes until medical attention arrives. If Swallowed: Do not induce vomiting. Drink two glasses of water, follow with orange juice and immediately call a physician. For Skin Contact: Flush thoroughly with cool water. Remove and wash contaminated clothing before reuse. Never give anything by mouth to an unconscious person. For Overexposure to Vapors: Remove victim to fresh air, keep warm, quiet and contact a physician.			
Sources Used: Raw material data, general toxicology from the trade for similar products.			
SECTION V - FIRE FIGHTING MEASURES			
Flammability: No		Autoignition Temperature: N. Av.	
Flash Point (method used): None			
Flammable Limits: N. Av.		LEL	UEL
Extinguishing Media N. Av.			
Water?	Foam?	Water Fog?	
Alcohol Foam?	CO₂?	Dry Chemical?	
Vaporizing Liquid?	Other?		
Special Fire Fighting Procedures: N. Av.			
Unusual Fire and Explosion Hazards: N. Av.			
TDG Flammability Classification: Non-flammable			
Sensitivity to Mechanical Impact: None			
Sensitivity to Static Discharge: None			
SECTION VI - ACCIDENTAL RELEASE MEASURES			
Steps to be taken in Case Material is Released or Spilled:			
Dike and contain spill with inert material (sand, earth, etc). Collect spill with mop, absorbent material (example: floor-dri) or vacuum. Thoroughly rinse affected area with water.			
SECTION VII - HANDLING AND STORAGE			
Precautions to be taken in Handling and Storing:			
Normal care in handling and storage.			
Other Precautions: Keep out of reach of children. Keep from freezing.			

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Respiratory Protection (Specify Types): Not required where ventilation is sufficient to maintain 2-Butoxy ethanol vapor level below listed TLV. Use NIOSH/MSHA approved organic vapor respirator in areas where vapor level exceeds TLV.					
Ventilation: Local Exhaust: Not required	Special: Not required				
Mechanical (General): As required to keep vapor levels below TLV & PEL, listed in Section XI.					
Other: Not required					
Protective Gloves: Natural rubber or synthetic.					
Eye Protection: Approved safety goggles or shield.					
Footwear: Rubber footwear.					
Other Protective Clothing or Equipment: Not required					
Work/Hygienic Practices: Do not contaminate food or beverages with cleaning chemicals.					
SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS					
Boiling Point: N. Av.	pH: 13 - 14				
Specific Gravity (H20) = 1: 1.05	% Volatile: N. Av.				
Vapor Density (Air = 1): N. Av.	Odor Threshold: N. Av.				
Evaporation Rate (Butyl Acetate = 1): N. Av.	Oil/Water Distribution				
Solubility in Water: Complete	Coefficient: N. Av.				
Vapor Pressure (MM HG): N. Av.	Melting Point: N. Ap.				
SECTION X - STABILITY AND REACTIVITY					
Stability: Unstable:	Stable: X				
Conditions to Avoid: N. Av.					
Incompatibility (materials to avoid): N. Av.					
Hazardous Decomposition or By-products: N. Av.					
Hazardous Polymerization:	May occur:				
Conditions to Avoid: N. Av.	Will not occur: X				
SECTION XI - TOXICOLOGICAL INFORMATION					
Chemical	OSHA PEL	ACGIH TLV	Recom.	LD50	LC50
A	50 ppm (skin)	20 ppm (skin)	N. Av.	470 mg/kg (rat, oral)	N. Av.
B	2 mg/m3 (skin)	2 mg/m2 (skin)	N. Av.	140 mg/kg (rat, oral)	N. Av.
Teratogen, Mutagen, Reproductive Toxin Status: No data with known relevance to humans.					
Toxicologically Synergistic Products: N. Av.					
SECTION XII - ECOLOGICAL INFORMATION					
Ecotoxicological Information: N. Av.					
Chemical Fate Information: N. Av.					
SECTION XIII - DISPOSAL CONSIDERATIONS					
Waste Disposal Method:					
Dispose of spilled material in accordance with local, state and federal regulations. Waste from normal cleaning procedures may be sewerred, depending on the materials and/or contaminants being cleaned as well as state, federal and local sewer commission regulations.					
RCRA Hazard Class: D002, characteristic corrosive.					
SECTION XIV - TRANSPORT INFORMATION					
Shipping Classification: corrosive liquid, basic inorganic, N.O.S. (Sodium Hydroxide), class 8					
UN Number: 3266					
Packing Group: II					
SECTION XV - PREPARATION DATA					
Prepared By: Health and Safety Department					
Telephone Number: 763-509-7937					
Date: 1/21/2015					
SECTION XVI - REGULATORY INFORMATION					
US Federal Regulations					
TSCA Status: All ingredients listed.					
CERCLA Reportable Quality: N. Av.					
SARA Title III					
Section 302 Extremely Hazardous Chemicals: None					
Section 311/312 Hazard Category: Immediate health, chronic health					
Section 313 Toxic Chemicals: Glycol ether					
SECTION XVII - OTHER INFORMATION					
None					
N. Ap. - Not Applicable; N.Av. - Not Available					

NFPA SYSTEM

2 A. Health Hazard 0 A. Fire Hazard 0 A. Reactivity Hazard

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION