



TORNADO DEGREASER

Tornado Degreaser is very effective at dissolving heavy grease, oil, and wax build up on truck bodies, chassis and concrete floors. **Tornado Degreaser** is our best heavy duty degreaser. It can also be used as a presoak for removing rubber and skid marks from floors or truck beds. Apply with a pressure washer, brush, or auto-scrubber.

FEATURES & BENEFITS

- **POWERFUL CLEANING ACTION**
Quickly removes dirt, oil and grease from a variety of substrates
- **NON-FLAMMABLE**
Water-base formulation
- **VERSATILE**
Can be used to clean walls, floors, engines, vehicles and rubber marks
- **LOW FOAM**
Low foaming product works well in floor scrubbers



DIRECTIONS

Concrete and Shop Floors: Apply with automatic floor equipment or conventional methods. **Tornado Degreaser** can be diluted 1:30 to 1:75, depending on soil level.

Degreasing Vehicle Engines: Dilute 1:10 to 1:30 in hot water. For very greasy surfaces, allow to soak for a few minutes before thoroughly rinsing with water.

Pressure Washing of Vehicles and Chassis: **Tornado Degreaser** will work better with hot water. When pressure washing, use a chemical injector that dilutes **Tornado Degreaser** at a ratio of 1:15 to 1:40. Remove large chunks of grease or soil with clean water prior to applying **Tornado Degreaser**. Apply **Tornado Degreaser** and allow to soak for a few minutes. Rinse thoroughly with water.

Dilution Ratio for other Applications:

Rubber Marks	1:5
Wax Stripping	1:10
Machinery	1:5

NOTE: See reverse side for MSDS information and General Cautions for Use

Visit our website at www.ver-techlabs.com

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	Potassium hydroxide CAS #1310-58-3	
C	Dodecylbenzene Sulfonic Acid CAS #27176-87-0	
D	Triethanolamine CAS #0102-71-6	
E	Water CAS #7732-18-5	

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview

Appearance and Odor: Yellow liquid, "butyl" 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. Ap.

Flash Point (method used): None

Flammable Limits: N. Ap. LEL UEL

Extinguishing Media: N. Ap.

Water?	Foam?	Water Fog?
Alcohol Foam?	CO ₂ ?	Dry Chemical?
Vaporizing Liquid?	Other?	

Special Fire Fighting Procedures: N. Ap.

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.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

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: Approximately 212°F **pH:** 13 - 14

Specific Gravity (H₂O) = 1: 1.05 **% Volatile:** 75 - 98

Vapor Density (Air = 1): > 1 **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. Ap.

Incompatibility (materials to avoid): N. Av.

Hazardous Decomposition or By-products: N. Av.

Hazardous Polymerization: May occur: Will not occur: X

Conditions to Avoid: N. Ap.

SECTION XI - TOXICOLOGICAL INFORMATION

Chemical	OSHA PEL	ACGIH TLV	Recom.	LD50	LC50
A	25 ppm (skin)	25 ppm (skin)	25 ppm (skin)	1.48 g/kg (rat, oral)	N. Av.
B	C2 mg/M ₃	C2 mg/M ₃	N. Av.	205 mg/kg (rat, oral)	N. Av.
C	None	None	N. Av.	650 mg/k (rat, oral)	510mg/m ³ /2h (rat,)
D	3 ppm	5mg/M ₃	N. Av.	N. Av.	N. Av.
E	None	None	N. Av.	N. Av.	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. (Containing potassium 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: 1-18-2007

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

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