



Vehicle Care Products



THUNDERBOLT

Thunderbolt is a liquid alkaline detergent designed as a presoak for one and two step touchless car washes. Remarkably improved cleaning performance over other presoaks. It is also used as a step one presoak for high pressure automatics or a second step presoak in a two step application following a safe acid presoak. Thunderbolt can be used as a non-corrosive high pressure detergent for truck and other vehicle surfaces including polished aluminum. Excellent high pressure prep gun soap for hard-to-remove road film in friction tunnels.

FEATURES & BENEFITS

- **Penetrates and removes tough road film and grime**
- **Removes eyebrows from windshields**
- **Aluminum safe**
- **Hard water tolerant**
- **Pleasant scent**
- **Can be used in conveyor dry end CTAs.**
- **Great car wash prep gun soap**
- **Used in truck washing of aluminum and painted surfaces, fleet washing, highway tunnel cleaning, railroad diesel engine cleaning, and floor scrubbing machines**

APPLICATION

Product Use	Recommended Dilution	Usage per Car
Touchless Automatics	1:32	4 oz. per gallon
Prep Guns	1:256 to 1:512	1/4-1/2 oz. per gallon
Wheel Washers	1:25 to 1:30	

Please note that dilution ratios may need to be adjusted based upon conditions.

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

MATERIAL SAFETY DATA SHEET

(COMPLIES WITH 29CFR 1910.1200)

SECTION I - CHEMICAL PRODUCT & COMPANY IDENTIFICATION		
Identity (As Used on Label and List): Thunderbolt (THU100)		
Product Class: Water-based degreaser		
Emergency Telephone Number: 800-535-5053 (INFOTRAC)		
Telephone Number for Information: 763-509-7937		
Manufacturers 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	Sodium Metasilicate CAS #9004-82-4	
SECTION III - HAZARDS IDENTIFICATION		
Emergency Overview		
Appearance and Odor: Clear liquid, Slight aroma.		
Primary Hazards: Irritant		
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:	No hazardous vapors.	
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.	
Carcinogenicity:	NTP? No IARC Monographs? No	
OSHA Regulated?	No	
Target Organ (s):	Eyes, skin and mucous membranes.	
Medical Conditions Generally Aggravated by Exposure:	N. Av.	
Health Hazards, Chronic:	N. Av.	
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 water, immediately call a physician. Never give anything by mouth to a unconscious person.		
For Skin Contact: Flush thoroughly with cool water. Remove and wash contaminated clothing before reuse.		
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?	CO ₂ ?	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.		
SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION		
Respiratory Protection (Specify Types): Not required		
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 (100°C) pH: 12 - 14	
Specific Gravity (H ₂ O = 1):	1.10 % Volatile:	
Vapor Density (Air = 1):	N. Av. Odor Threshold: N. Av.	

Evaporation Rate (Butyl Acetate = 1):	N. Av.	Oil/Water Distribution Coefficient:	N. Av.
Solubility in Water:	Complete		
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	2mg/m3	2mg/m3	N. Av.	800 mg/kg (rat, oral)	N. Av.

Teratogen, Mutagen, Reproductive Toxin Status:	No
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 sewer, depending on the materials and/or contaminants being cleaned as well as state, federal and local sewer commission regulations.	
RCRA Hazard Class: DOO2, characteristic corrosive.	

SECTION XIV - TRANSPORT INFORMATION	
Shipping Classification:	Cleaning compound NOI
UN Number:	
Packing Group:	

SECTION XV - PREPARATION DATA	
Prepared By:	Health and Safety Department
Telephone Number:	763-509-7937
Date:	5-27-2008

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:	None

SECTION XVII - OTHER INFORMATION	
None	
N. Ap. - Not Applicable; N. Av. - Not Available	

NFPA SYSTEM		
<u>2</u> A. Health Hazard	<u>0</u> A. Fire Hazard	<u>0</u> A. Reactivity Hazard
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