



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

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# MATERIAL SAFETY DATA SHEET

(COMPLIES WITH 29CFR 1910.1200)

<b>SECTION I - CHEMICAL PRODUCT &amp; COMPANY IDENTIFICATION</b>	
Identity (As Used on Label and List): Thunderbolt	
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	
<b>SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS</b>	
Hazardous Components (Specific Chemical Identity):	
Chemical	Common Name(s)
A	Sodium Metasilicate CAS #9004-82-4
<b>SECTION III - HAZARDS IDENTIFICATION</b>	
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
Target Organ (s):	Eyes, skin and mucous membranes.
Medical Conditions Generally Aggravated by Exposure:	N. Av.
Health Hazards, Chronic:	N. Av.
<b>SECTION IV - FIRST AID MEASURES</b>	
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.	
<b>SECTION V - FIRE FIGHTING MEASURES</b>	
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?	CO2? 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
<b>SECTION VI - ACCIDENTAL RELEASE MEASURES</b>	
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.	
<b>SECTION VII - HANDLING AND STORAGE</b>	
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.	
<b>SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION</b>	
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.	

<b>SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS</b>					
Boiling Point:	Approximately 212°F (100°C)	pH:	12 - 14		
Specific Gravity (H2O) = 1:	1.10	% Volatile:			
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.				
<b>SECTION X - STABILITY AND REACTIVITY</b>					
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.				
<b>SECTION XI - TOXICOLOGICAL INFORMATION</b>					
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.					
<b>SECTION XII - ECOLOGICAL INFORMATION</b>					
Ecotoxicological Information: N. Av.					
Chemical Fate Information: N. Av.					
<b>SECTION XIII - DISPOSAL CONSIDERATIONS</b>					
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.					
<b>SECTION XIV - TRANSPORT INFORMATION</b>					
Shipping Classification: Cleaning compound NOI					
UN Number:					
Packing Group:					
<b>SECTION XV - PREPARATION DATA</b>					
Prepared By: Health and Safety Department					
Telephone Number: 763-509-7937					
Date: 5-27-2008					
<b>SECTION XVI - REGULATORY INFORMATION</b>					
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					
<b>SECTION XVII - OTHER INFORMATION</b>					
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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