



THUNDERBOLT

NFPA/HMIS : Health -3
Flammability - 0
Reactivity - 0

Complies With USDL Safety and Health Regulations, (29 CFR 1910.200)
US Department Of Labor
Material Safety Data Sheet

SECTION - 1 CHEMICAL AND COMPANY IDENTIFICATION

PRODUCT NAME: Thunderbolt
PRODUCT USE: Degreaser

American Formula
4720 Frederick Drive SW
Atlanta, GA 30336

EMERGENCIES: 1-800-255-3924
REVISION DATE: 03/30/05

SECTION - 2 COMPOSITION ON INGREDIENTS

CAS #	CHEMICAL NAMES	Wt%	TLV (UNITS)
111-76-2	2-butoxyethanol	< 16	25 (PPM) skin
1310-58-3	Potassium Hydroxide	< 4	2 mg/ m ³
6634-92-0	Sodium Metasilicate	< 2	10mg/m ³ TWA

N/E = not established

SECTION - 3 HAZARDS INFORMATION

PRIMARY ROUTE(S) OF ENTRY: Skin contact /absorption and inhalation
SIGNS AND SYMPTOMS OF OVEREXPOSURE: Gastrointestinal irritation (nausea, vomiting, diarrhea), irritation to nose, throat, and respiratory tract.
TARGET ORGAN EFFECTS: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders or these organs in humans: chronic ingestion may cause kidney and liver lesions at high doses.

IMMEDIATE HEALTH EFFECTS

EYES: Corrosive. Exposure may cause noticeable pain, and severe irritation and transient corneal injury.

SKIN: Corrosive. Causes chemical burns. Harmful contact may not cause immediate pain. Ethylene glycol monobutyl ether and 2-aminoethanol may be absorbed through the skin.

INHALATION: Exposure to vapor or mist is possible. Short term inhalation is no likely to cause harmful effects: breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations

exceeding the recommended exposure limits.

INGESTION: Harmful or fatal if swallowed. Causes chemical burns to the mouth, throat and stomach.

REPRODUCTIVE / DEVELOPMENTAL INFORMATION

No Data

CARCINOGENIC INFORMATION: This material is not listed as a carcinogen by IARC, NTP, or OSHA

LONG TERM EFFECTS: No Data

SECTION - 4 FIRST AID MEASURES

EYES: Immediately flush with water. Remove contact lenses, if applicable, and continue flushing with water for 15 minutes. Call a physician immediately.

SKIN: Immediately flush with water for 15 minutes. Call physician if irritation persists. Completely decontaminate clothing, shoes, and leather goods before reuse or discard.

INHALATION: If symptoms develop move victim to fresh air. If symptoms persist, call a physician.

INGESTION: Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water or milk. Call a physician immediately. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness or is convulsing.

SECTION - 5 FIRE FIGHTING MEASURES

FLASH POINT: No Flash at Boil (C.C. method)

EXPLOSIVE LIMITS: Not Applicable

AUTOIGNITION TEMPERATURE: Not Applicable

HAZARDOUS PRODUCTS OF COMBUSTION: Oxides of carbon, oxides of nitrogen, and ammonia

EXTINGUISHING MEDIA: Not Applicable

FIRE FIGHTING INSTRUCTIONS: Avoid contact with this material. Avoid walking in spilled material. Wear protective clothing for skin and eyes.

SECTION - 6 ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb with an inert solid and scoop up for disposal, then rinse soiled area with water down the drain.

LARGE SPILL: Stop leak at the source and collect into a suitable container, then treat as a small spill.

SECTION - 7 HANDLING AND STORAGE

HANDLING: Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

STORAGE: Store in a cool, dry place. Keep container closed when not in use.

SECTION - 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION: Chemical Splash goggle in compliance with OSHA regulations are advised: however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

SKIN PROTECTION: Wear rubber gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY PROTECTION: If workplace exposure limits of product or any component are exceeded (see exposure guidelines), NIOSH/OSHA approved air supplied respirator is advised in the absence of proper environmental control. OSHA relations also permit other NIOSH/OSHA respirators (negative pressure type) under specific conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

ENGINEERING CONTROLS: Provide sufficient mechanical (general and local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

SECTION - 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Thin, red liquid with a glycol ether odor
pH CONCENTRATE: 12.5 - 13.5
VAPOR PRESSURE: Unknown
VAPOR DENSITY: Unknown
BOILING POINT: 212 Degrees Fahrenheit
SOLUBILITY IN WATER: Complete
PERCENT VOLATILE: 90%
SPECIFIC GRAVITY: (H₂O =1) 1.05 +/- 0.02

SECTION - 10 STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: Temperature Extremes
INCOMPATIBILITY: Chlorine Bleach, Oxidizers, Acids
HAZARDOUS DECOMPOSITION: Will not Occur
HAZARDOUS POLYMERIZATION: Will not Occur

SECTION - 11 TOXICOLOGICAL INFORMATION

NO DATA AVAILABLE

SECTION - 12 ECOLOGICAL INFORMATION

NO DATA AVAILABLE

SECTION - 13 DISPOSAL CONSIDERATION

WASTE DISPOSAL INFORMATION: Dispose of in accordance with all applicable Federal, State, and Local regulations.
RCRA Information: If this material becomes a waste, it would be considered hazardous under 40 CFR 261.22. and would be classified as EPA Waste Number D002.

SECTION - 14 TRANSPORT INFORMATION

DOT Information 49 CFR 172.10
 DOT Description:
 33440 Class 55
 DOT Hazard Class:
 8, NA 1760, II
 Hazardous Component:
 Potassium Hydroxide
Reportable Quantity (RQ) - 49 CFR 172.101
 Not Applicable

TSCA (Toxic Substances Control Act) Status
 TSCA (United States) The intentional ingredients
 of this product are listed.

CERCLA RQ - 40 CFR 355 Appendix A
 None

SARA 302 Components 40 CFR Appendix A
 None

Section 311/312 Hazard Class 40 CFR 370.2

Immediate (X) Delayed (X) Fire ()

Reactivity () Sudden Release of Pressure ()

SARA 313 Components - 40 CFR 372.65

CAS #	Chemical Names	%
N/A	* Glycol Ethers	< 16.0

* Listed in Section 2 as Ethylene Glycol Monbutyl Ether

STATE AND LOCAL REGULATIONS

California Proposition 65: None

California SCAQMD Rule 443.1 VOC's: > 250g/L

North Carolina Administrative Code 2D.1104 and 2B.0610: None

South Carolina Regulation 62.5 Standard Number 8

Ethylene Glycol Monobutyl Ether < 16.0

SECTION - 16 OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable and suitable to their circumstances.

This information was compiled from current manufacturer's MSDS's of the component parts of the product. as well as other sources, such as:

Code of Federal Regulations 29, Revised as of July 1, 1994.

Code of Federal Regulations 40, Revised as of July 1, 1994.

ACGIH, Guide to Occupational Exposure Values, 1996.

ANSI Z129.1-1994, Precautionary Labeling for Hazardous Industrial Chemicals.

Hazard Communication Handbook, A Right To Know Compliance Guide.

Craig A. Moyer & Michael Francis. Clark Broadman Company. Ltd. New York, NY 1992

RCRA Regulations and Keyword Index, Compiled and Published by McCoy and Associates, Inc Lakewood, Colorado. 1992.

SECTION - 15 REGULATORY INFORMATION

US FEDERAL REGULATIONS: