

Safety Data Sheet: #500 Retarding Thinner

Section 1: Identification

Product Name: #500 Retarding#500 Thinnerr
Manufacturer's Name: Peacock Laboratories
Address: 1901 S. 54th Street
City, State, Zip: Philadelphia, PA, 19143
Phone Number: (215)-729-4000
Emergency Contact: (215)-729-4000
Chemtrec: (800)-424-9300

Recommended Use: A retarding thinner for use with Permalac products.

Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227

Acute toxicity, oral (Category 4), H302

Acute toxicity, inhalation (Category 4), H332

Acute toxicity, dermal (Category 4), H312

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

For the full text of the H-Statements mentioned in this section, see Section 16.

2.2 GHS Label Elements (Including Precautionary Statements)

Hazard Pictogram



Signal Word: WARNING

Hazard Statements

H227 Combustible liquid.

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statements

[Prevention]

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

[Response]

P301 + P312 + P330 IF SWALLOWED, call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

P302 + P352 + P312 IF ON SKIN, wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell.

P304 + P340 + P312 IF INHALED, move the person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338 IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs, get medical advice/attention.

P337 + P313 If eye irritation persists, get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire, use dry sand, dry chemical or alcohol-resistant foam to extinguish.

[Storage]

P403 + P235 Store in a well-ventilated place. Keep cool.

[Disposal]

P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards Not Otherwise Classified (HNOC)

Rapidly absorbed through skin.

Section 3: Composition/Information on Ingredients

Component	CAS #	Amount
Ethylene Glycol Monobutyl Ether	111-76-2	> 99.0%

Section 4: First Aid Measures

4.1 Description of first aid measures

GENERAL: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Show this safety data sheet to the doctor in attendance.

INHALATION: If inhaled, move the person to fresh air. If not breathing, give artificial respiration. Consult a physician.

EYES: Flush eyes thoroughly with water for at least 15 minutes. If any irritation occurs, call a doctor or physician.

SKIN: Remove contaminated clothing. Wash skin thoroughly with soap and water, or use a recognized skin cleanser. Launder contaminated clothing before reuse.

INGESTION: If swallowed, seek immediate medical attention. DO NOT induce vomiting. Rinse mouth cautiously with water.

Section 5: Fire Fighting Procedures

Suitable Extinguishing Media: Water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers, foam, alcohol-resistant foams (ATC type are preferred). General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Special Hazards Arising from Substance/Mixture: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to carbon monoxide, and carbon dioxide.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct waterstream to hot liquids.

Advice for Firefighters: *Keep people away.* Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until the fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety devices or discoloration of the container. Burning liquids may be extinguished by dilution with water.

Do *not* use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical-resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical-resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to Sections 6 and 8.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Ventilate area of leak or spill. No smoking in area. Keep upwind of spill. Refer to Section 7 for additional precautionary measures.

Use appropriate safety equipment. For additional information, refer to Section 8.

6.2 Environmental Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12 for more information.

6.3 Methods and Materials for Containment and Cleaning Up

Contain spilled material if possible.

For Small Spills: Absorb with materials such as non-combustible material, clay, or Zorb-all®.

For Large Spills: Dike area to contain spill. Collect in suitable and properly labeled containers. See Section 13 for additional information.

Section 7: Handling & Storage

Avoid contact with eyes, skin, and clothing. Keep away from heat, sparks and flame(s).

Containers, even those that have been emptied, can contain vapors.

Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Do not swallow. Wash hands thoroughly after handling.

Other Precautions: Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures, possibly resulting in spontaneous combustion.

Store in the Following Material(s): Carbon steel, stainless steel, phenolic lined steel drums.

DO NOT STORE IN: aluminum, copper, galvanized iron, galvanized steel.

Section 8: Exposure Controls/Personal Protection

Exposure Limits Component List Type Value

Ethylene Glycol Monobutyl Ether

ACGIH TWA 20 ppm OSHA Table Z-1 PEL 240 mg/m³ 50 ppm SKIN

A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with

vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.

Eye/Face Protection: Use chemical goggles. If exposure causes eye discomfort, use a full face-respirator.

Skin Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand Protection: Use chemical-resistant gloves. Examples of preferred glove barrier materials include: butyl rubber, or ethyl vinyl alcohol laminate (EVAL). Examples of acceptable glove barrier materials include natural rubber (latex), neoprene, nitrile/butadiene rubber (NBR), polyvinyl chloride, or viton.

**The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors, such as, but not limited to other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: organic vapor cartridge.

Hygiene: Use good personal hygiene. DO NOT consume or store food in the work area. Wash hands well before smoking or eating.

Engineering Controls-Ventilation: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements/guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Section 9: Physical and Chemical Properties

Physical State, Appearance and Odor: Colorless liquid with mild odor

Boiling Point (760 mm Hg): 171°C (340°F) literature

Freezing Point: -75°C (-103°F) literature

Flash Point-Closed Cup: 67°C (153°F) literature

Evaporation Rate (Butyl Acetate = 1): 0.06 literature

Flammability (Solid, Gas): Not a flammable product

Flammable Limits in Air: Lower 1.3% (V); Upper 10.6% (V)

Vapor Pressure: 0.87 mm Hg @ 20°C ASTM E1719

Vapor Density (Air = 1): No test data available

Specific Gravity (Water = 1): 0.9005 - 0.9040 20°C Hydrometer

Solubility in Water by Weight: 100% @ 20°C literature

Partition Coefficient: n-octanol/water (log Pow) 0.81

Measured Auto-Ignition Temperature: 230°C (446°F) literature

Decomposition Temperature: No test data available

Dynamic Viscosity: 3.3 mPa.s @ 20°C

Kinematic Viscosity: 3.7 mm²/s @ 20°C

Liquid Density: 7.5347 lb/gal @ 15.56°C, 7.504 lb/gal @ 20°C, 8.1259 lb/gal @ -70°C (at freezing point)

Molecular Weight: 118.2 g/mol

Surface Tension: 65 mN/m literature; Henry's Constant (H) 1.60E-06 atm*m³/mole measured

*The above data are approximate or typical values and should not be used for precise design purposes.

Section 10: Stability and Reactivity Data

Chemical Stability: Thermally stable at typical use temperatures.

Reactivity: No dangerous reactions known under conditions of normal use.

Incompatibility (materials to avoid): Strong acids and strong oxidizers.

Hazardous Decomposition Products: Hazardous decomposition products depend upon temperature, air supply, and the presence of other materials. These products can include, but are not limited to, aldehydes, ketones, and organic acids.

Hazardous Polymerization: Will not occur under normal conditions.

Conditions to Avoid: DO NOT distill to dryness. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems. Inhibitor: 2, 6-Di-tert-butyl-p-cresol (BHT).

Section 11: Toxicological Information

Acute Toxicity

Ingestion

LD50, Rat: 1,300 mg/kg

LD50, Guinea Pig: 1,400 mg/kg

Dermal

LD50, Guinea Pig: > 2,000 mg/kg

Inhalation

LC0, 1 h, Vapor, Guinea Pig: > 3.1 mg/l

No deaths occurred at this concentration.

Eye Damage/Irritation

May cause severe eye irritation. May cause moderate corneal injury. Effects may be slow to heal. Vapor may cause eye irritation experienced as mild discomfort and redness.

Skin Corrosion/Irritation

Brief contact may cause slight skin irritation with local redness. Repeated exposure may cause irritation, even a burn. May cause more severe response on covered skin (under clothing, gloves).

Sensitization-Skin

Did not cause allergic skin reactions when tested in humans. Did not cause allergic skin reactions when tested in guinea pigs.

Respiratory

No relevant data found.

Repeated Dose Toxicity

In animals, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

Chronic Toxicity and Carcinogenicity

In long-term animal studies with ethylene glycol butyl ether, small but statistically significant increases in tumors were observed in mice but not rats. The effects are not believed to be relevant to humans. If the material is handled in accordance with proper industrial handling procedures, exposures should not pose a carcinogenic risk to man.

Carcinogenicity Classifications: *Ethylene Glycol Monobutyl Ether*

ACGIH: Confirmed animal carcinogen with unknown relevance to humans.

Group A3 Developmental Toxicity: Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Reproductive Toxicity: In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Genetic Toxicology: In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative.

Section 12: Ecological Information

Toxicity: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Fish Acute and Prolonged Toxicity: LC50, *Oncorhynchus mykiss* (rainbow trout), static test, 96 h: 1,474 mg/l

Aquatic Invertebrate Acute Toxicity: EC50, *Daphnia magna* (water flea), static test, 48 h, immobilization: 1,550 mg/l

Aquatic Plant Toxicity: EbC50, *Pseudokirchneriella subcapitata* (green algae), static test, biomass growth inhibition, 72 h: 911 mg/l

Toxicity to Microorganisms: IC50; Bacteria: > 1,000 mg/l

Fish Chronic Toxicity Value (ChV): *Danio rerio* (zebra fish), semi-static test, 21 d, NOEC: > 100 mg/l

Aquatic Invertebrates Chronic Toxicity Value: *Daphnia magna* (water flea), semi-static test, 21 d, reproduction, NOEC: 100mg/l

Persistence and Degradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% biodegradation in OECD test(s) for inherent biodegradability).

OECD Biodegradation Tests

Biodegradation Exposure Time Method 10 Day Window: 90.4% 28d

OECD 301B Test Pass

Biological Oxygen Demand (BOD): BOD 5 BOD 10 BOD 20 BOD 28: 5.2% 57% 72.2%

Chemical Oxygen Demand: 2.21 mg/g

Theoretical Oxygen Demand: 2.30 mg/mg

Bioaccumulative Potential Bioaccumulation: Bioconcentration potential is low (BCF < 100 or LogPow < 3).

Mobility in Soil: Potential for mobility in soil is high (Koc between 50 and 150). Partition coefficient, soil organic carbon/water (Koc): 67 Estimated.

Section 13: Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER.

All disposal practices must be in compliance with all federal, state/provincial and local laws and regulations. Regulations may vary in different locations.

Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL.

The information presented here pertains ONLY to the product as shipped in its intended condition as described in Section 3.

If the product is unused or uncontaminated, the preferred option is to send it to a licensed, permitted incinerator or other thermal destruction device.

Section 14: Transport Information

Bulk Proper Shipping Name: COMBUSTIBLE LIQUID

N.O.S. Technical Name: CONTAINS ETHYLENE GLYCOL MONOBUTYL ETHER

Hazard Class: COMBUSTIBLE LIQUID

ID No.: NA 1993

PG: III

DOT: Not regulated

IMDG: Not regulated

ICAO/IATA: Not regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the

responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Section 15: Regulatory Information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313: *2-Butoxyethanol* (CAS-No. 111-76-2); Revision Date 1993-04-24

SARA 311/312 Hazard: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

2-Butoxyethanol

CAS-No. 111-76-2; Revision Date 1993-04-24

Pennsylvania Right To Know Components

2-Butoxyethanol

CAS-No. 111-76-2; Revision Date 1993-04-24

New Jersey Right To Know Components

2-Butoxyethanol

CAS-No. 111-76-2; Revision Date 1993-04-24

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Section 16: Other Information

Full text of H-Statements referred to under Sections 2 and 3.

Acute Tox. Acute toxicity

Eye Irrit. Eye irritation

Flam. Liq. Flammable liquids

H227 Combustible liquid.

H302 Harmful if swallowed.

H302 + H312 + H33 Harmful if swallowed, in contact with skin or if inhaled.

H312 Harmful if in contact with skin.

HMIS Rating Health Hazard: 2

Chronic Health Hazard: Not available

Flammability: 2

Physical Hazard: 0

NFPA Health Hazard: 2

NFPA Fire Hazard: 2

NFPA Reactivity: 0

Date of Last Revision: 11/30/2023 Good Through 11/30/2026

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