

MATERIAL SAFETY DATA SHEET
(COMPLIES WITH C.O.S.H.H. REGULATIONS)
Date of Preparation 01/10/03

1. PRODUCT INFORMATION

1.1 Product Identifier:	PD 500 Terpene Degreaser
1.2 Description:	Solvent cleaner
1.3 Supplier:	Bio-Industries Ltd, Unit 66d Heather Road, Sandyford Industrial Estate, Dublin, Ireland.
1.4 Emergency Tel:	01-2941025
1.5 Application:	oil grease remover

2. COMPOSITION & INFORMATION ON INGREDIENTS

2.1 INGREDIENTS:	Terpene Alcohols / Terpene Hydrocarbons / DBE mixture
2.3 CAS :	Not applicable (mixture)
2.3 LD₅₀:	Oral – Rat: 3500 mg/kg , Oral – Mouse: 5320 mg/kg , Oral – Rabbit: 3500 mg/kg Skin – Rabbit: 8000 mg/kg.

3. HAZARD IDENTIFICATION

-
- 3.1 FDA-GRAS rating** ("generally recognized as safe")
- 3.2 Code letter** an hazard identification of product: -
- Risk phrases:- R36/R38 Irritating to eyes and skin, may cause stinging or burning.
- Safety Phrases:- S26 In case of contact with Eyes rinse immediately with plenty of water an seek medical advice. If swallowed, seek medical advice immediately and show this label
-

4. FIRST AID MEASURES

Health Hazards (Acute and Chronic): Product is harmful if swallowed. Ingestion may cause vomiting, headache, and other medical problems. May be irritating to skin and eyes. Skin contact may cause slight redness. Contains a potential skin sensitizer. Eye contact can cause moderate to high irritation. Inhalation can cause nose, throat, and respiratory tract irritation, coughing and headache.

Prolonged or repeated exposure can cause drying, de-fatting, and dermatitis of skin.

Signs and Symptoms of Exposure: Product may be irritating to the skin, eyes, nose and throat.

Medical Conditions Generally Aggravated by Exposure: Persons with allergies or pre-existing skin conditions should avoid contact with this product.

Emergency & First Aid Procedures Eyes: Remove contact lenses at once. Flush with water for at least 15 minutes. If irritation persists, seek medical attention.

Skin: Wash affected area with copious amounts of soap and water. If irritation develops, seek medical attention.

Ingestion: Seek medical attention immediately. Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Do not leave victim unattended. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing.

Inhalation: If symptoms of overexposure are experienced, evacuate to fresh air. If symptoms persist, seek medical attention.

5. FIRE AND EXPLOSION DATA

Flammability: Flammable Limits: LEL = 0.7% UEL = 6.1%

Flash Point: Greater than 200°F

Combustible liquid. Keep away from heat, sparks, and open flame. Guard against spontaneous combustion of improperly discarded oily rags

Extinguishing Media: Carbon dioxide, foam or dry chemical

Special Fire Fighting Procedures: SCBA recommended. Smother to exclude air. Do not use water. Handle as an oil fire.

Unusual Fire and Explosive Hazards: Combustible liquid. Keep away from heat, sparks, and open flame. Guard against spontaneous combustion of improperly discarded oily rags.

Incompatibility (Materials to avoid): Strong oxidizing agents and acidic agents including acidic clays, peroxides, halogens, vinyl chloride, and iodine pentafluoride.

Hazardous Decomposition Materials: Smoke may be acrid and fume irritating. Burning generates CO, CO₂, and smoke.

Hazardous Polymerisation: None described

Conditions to Avoid for Polymerisation: Polymerisation catalysts such as aluminium chloride and acidic clays.

Stability Considerations: Stable

Conditions to Avoid for Stability: Avoid temperatures over 115° F (46°C)

6. ACCIDENTAL RELEASE MEASURES

Use protective gloves to avoid skin contact. Small spills can be wiped up. Large spills should be absorbed by dirt, sand, or other suitable absorbents for disposal. Move leaking containers to well ventilated area. No smoking. Eliminate any source of ignition. Minimize inhalation. Use NIOSH approved respiratory protection device in areas of high vapour concentration. CAUTION: slippery on floor.

Waste Disposal Method: Incinerate or Dispose in Accordance with Local, State, and Federal Regulations. Taking regulations into consideration, waste may be incinerated or handled through EPA spill control plan via land fill or dilution.

7. HANDLING AND STORAGE

7.1 Storage : Store in cool dark place. Temp is not to exceed 20°C. Do not freeze.

7.2 Packaging materials: vented drums.

7.3 Incompatibilities: Strong oxidizing agents and acidic agents including acidic clays, peroxides, halogens, vinyl chloride, and iodine pentafluoride

7.4 Other information : None established

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Exposure controls: Refer to section 7

8.2 Exposure controls for hazardous components

Name: Graffiti Remover

8.3 Personal protective equipment

Respiratory: Respiratory protection is not normally required.

Hand: Gloves are not normally required (plastic or PVC)

Eye: Safety glasses

Skin: Protective equipment is not normally necessary.

Industrial Hygiene: Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

9. PHYSICAL DATA

9.1 Appearance

Physical State:

Clear Liquid

Colour: Colourless

Odour: Faint Pine Odour

Clarity: Opaque to Clear

9.2 Safety Related Information

Specific Gravity: 1.047 @ 25°C

pH: Not Applicable

Percent Volatile: 100%

Viscosity: 11.1 cps

Solubility in Water : Miscible

Boiling Point (deg C): 154°C

: Not determined

Melting point/melting range: NA

Flashpoint: 46°C

Flammability : LEL = 0.7% UEL = 6.1%

Autoflammability : Not determined

Explosive Properties: Combustible

Oxidising properties: Not determined

Vapour pressure: Not determined

Solubility in Water: Insoluble

Solubility in fat: soluble

Oil/water partition coefficient: Not determined

Vapour density (air=1): Not determined

evaporation rate (Medium/Fast

Volatile: yes

Molecular Weight

10. REACTIVITY

10.1 Conditions of Chemical Instability: None Known

10.2 Incompatible Materials: Strong oxidising agents /chlorine /bleach

10.3 Conditions for Reactivity: None Known

11. TOXICOLOGICAL INFORMATION AND HEALTH HAZARDS

This product contains no IARC, NTP or OSHA listed carcinogens.

Acute Eye Irritation: Eye irritation, rabbit. Severely irritating.

Acute Skin Irritation: Skin irritation, rabbit. Severely irritating.

Acute Dermal Toxicity: LD50 - >5 g/kg, rabbit.

Acute Respiratory Irritation: No test data found for product.

Acute Inhalation Toxicity: No test data found for product.

Acute Oral Toxicity: LD50 - >5 g/kg, rat.

Ecotoxicological Information: NA

12.1 Elimination(3)

Persistence: Not known

Degradability: material is bio-degradable

12.2 Behaviour in the aquatic compartment (3)

Mobility: NA

Bioaccumulation: N/A

12. Ecological Impact

12.1 Although PD 500 Degreaser is biodegradable, the product should not be allowed to enter surface drains, sewers or depot effluent plants. However, normal use of the product according to manufacturers instructions, followed by wiping of treated surfaces with a damp cloth should result in complete removal of solvent residual.

13. WASTE DISPOSAL

13.1 Product Disposal : Dispose of in accordance with the Federal, State, and Local regulations regarding pollution. Avoid discharge to natural waters.

13.2 Packaging disposal: Packaging should be disposed of in accordance with regional and/or national regulations.

14. TRANSPORT INFORMATION

UNNO: NA

SYMBOLS: NA

14.1 Road & Rail transport (ADR/RID)

Proper Shipping Name: TERPENE HYDROCARBONS, N.O.S.

Hazard Class: 3

Identification No.: UN2319

Packing Group: III

15. REGULATORY INFORMATION

15.1 EEC supply classification & labelling: (1)

Contains: NA

No special packaging or labelling requirements.

Ozone depleting chemicals: No ozone depleting chemicals are present or used in manufacture.

EINECS: All ingredients listed or exempt

TSCA: All ingredients listed or exempt

MITI: Not determined

DSL: All ingredients listed or exempt

AICS: All ingredients listed or exempt

15.2 National legislation:

For product information in other EC languages, including appropriate national legislation, please contact the sales office at the above address.

15.3 Other regulations:

(1) According to 93/18/EEC as adapted for the 3rd time to technical progress commission directive 88/379/EEC.

16. OTHER INFORMATION

This product safety data sheet was prepared in compliance with European directive 91/155 as amended by Directive 2001/58 and on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labelling of dangerous substances and preparations.

It is the responsibility of persons in receipt of the product safety data sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose of or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the above information it is the recipient's sole responsibility to ensure the transfer of all relevant information from Product safety data sheet to their own Product safety data sheet in compliance European directive 91/155 as amended by Directive 2001/58 All information and instruction provide in this safety data sheet (SDS) are based on the current state scientific and technical knowledge at the date indicated on the present SDS. Bio-Industries shall not be held responsible for any defect in the product covered by this SDS should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.