SAFETY DATA SHEETS

This SDS packet was issued with item:

078481165

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078435509

1. PRODUCT & COMPANY IDENTIFICATION

Product Identification: Detachol® Adhesive Remover

Manufacturer: Ferndale Laboratories, Inc.
780 West Eight Mile Road
Ferndale, Michigan 48220-2498
U.S.A.

Telephone Number: 1-248-548-0900
Fax Number: 1-248-548-8427

2. INGREDIENTS/IDENTITY INFORMATION

Proprietary: No
Ingredient: Odorless Mineral Spirits [Naphtha , (petroleum), hydrotreated, heavy]
Ingredient Sequence Number: 01
Percent: 99.9%
CAS Number: 64742-48-9

Proprietary: No
Ingredient: D & C Red #17
Ingredient Sequence Number: 02
Percent: <0.1%

Proprietary: Yes
Ingredient: Many Flowers Fragrance
Ingredient Sequence Number: 03
Percent: <0.1%

3. HAZARD IDENTIFICATION

Emergency Overview: This material is HAZARDOUS by OSHA Hazard Communication definition.

Signal Words: DANGER! COMBUSTIBLE

	Health	Flammability	Reactivity
Hazardous Materials Identification (HMIS)	1	2	0
National Fire Protection Association (NFPA)	1	2	0

Potential Health Effects:
Routes of Exposure: Inhalation, Skin, Ingestion, Eye

Variability Among Individuals: Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

Effects of Overexposure: High vapor concentrations (greater than approximately 1000 ppm) are irritating to the eyes and respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

Conditions Aggravated by Exposure Skin contact may aggravate an existing dermatitis.

4. FIRST AID MEASURES

Take precautions to ensure your own health and safety before attempting rescue and providing first aid.

Inhalation: If overcome by vapor, remove from exposure and call a physician immediately. If breathing is irregular or has stopped, start resuscitation, administer oxygen if available.

Eye: Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, call a physician.

Skin: In case of skin contact, remove any contaminated clothing and wash skin with soap and water. Launder or dry-clean clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Ingestion: If ingested, DO NOT induce vomiting; call a physician immediately.

5. FIRE FIGHTING

Flash Point: (odorless mineral spirits) 49°C (120°F) ASTM D 56, Tag Closed Cup

Autoignition Temperature: (odorless mineral spirits) Approximately 349°C (660°F) ASTM D2155

Flammable or Explosive Limits (Approximate percent by volume in air)

Lower Explosive Limit: (estimated value - odorless mineral spirits) 1.3%
Upper Explosive Limit: (estimated value - odorless mineral spirits) 9.8%

Extinguishing Media and Fire Fighting Procedures: Foam, water spray (fog), dry chemical carbon dioxide and vaporizing liquid type fire extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire and circumstances related to the situation. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Guide on Hazardous Materials", Tenth Edition (1991).

Use dry chemical, foam or carbon dioxide to extinguish the fire. "Water may be ineffective", but water should be used to keep fire-exposed containers cool. If a leak or spill has ignited, use water spray to disperse the vapors and to protect persons attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing of gases, vapor, fumes or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.
NOTE: The inclusion of the phrase "Water may be ineffective" is to indicate that although water can be used to cool and protect exposed material, water may not extinguish the fire unless used under favorable conditions by experienced fire fighters trained in fighting all types of flammable liquid fires.

Decomposition: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

6. ACCIDENTAL RELEASE MEASURES

Clean Water Act / Oil Pollution Act: This product may be classified as an oil under Section 311 of the Clean Water Act, and under the Oil Pollution Act. Discharge or spills into or leading to surface waters that cause a sheen must be reported to the National Response Center (1-800-424-8802).

Steps To Be Taken In Case Material Is Released Or Spilled: Shut off and eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas.

Assure conformity with applicable government regulations. Continue to observe precautions for volatile, combustible vapors from absorbed materials.

7. HANDLING AND STORAGE

Handling Precautions: This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode. Keep product away from ignition sources, such as heat, sparks, pilot lights, static electricity, and open flames.

"Empty" Container Warning: "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, drill grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause injury or death.

Do not attempt to refill or clean containers since residue is difficult to remove. All containers should be disposed of in an environmentally safe manner and in accordance with government regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit for total product (odorless mineral spirits)**:** 177 ppm based on total hydrocarbon for an 8-hour workday.

Ventilation: Use only with ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentration of vapor in air. No smoking, or use of flame or other ignition sources.

Respiratory Protection: Use supplied-air respiratory protection in confined or enclosed spaces, if needed.

Protective Gloves: Use chemical-resistant glove, if needed, to avoid prolonged or repeated skin contact.

Eye Protection: Use splash goggles or face shield when eye contact may occur.

Other Protective Equipment: Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing, which could result in prolonged or repeated skin contact.

Work Practices/Engineering Controls: To prevent fire or explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system in accordance with National Fire Protection publications.

Keep containers closed when not in use. Do not store near heat, sparks, flame or strong oxidants. To prevent fire and explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system in accordance with the National Fire Protections standard for petroleum products.

In order to prevent fire or explosion hazards, use appropriate equipment.

Information on electrical equipment appropriate for use with this product may be found in the latest edition of the National Electrical Code (NFPA-70), This document is available from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269.

Personal Hygiene: Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry clean before re-use. Remove contaminated shoes and thoroughly clean and dry before re-use. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: clear orange liquid

Boiling Range: (odorless mineral spirits) 178-189°C (354-372°F)

Vapor Pressure (mm Hg @ 70°C): (odorless mineral spirits) 1.0 mm Hg @ 20°C (68°F) ASTM D 2879

Vapor Density (Air = 1) (odorless mineral spirits) 5.4

Percent Volatiles by Volume: (odorless mineral spirits) Approx. 50% in 47 minutes @ 1 atm. and 25°C (77°F)

Specific Gravity: (15.6 °C/15°C) (odorless mineral spirits) 0.76 (6.31 lb/gal)

Evaporation Rate (n-Butyl Acetate = 1) (odorless mineral spirits) 0.09 @ 1 atm. and 25°C (77°F)

Solubility in Water: (odorless mineral spirits) Negligible, 0.0001% @ 1 atm. and 25°C (77°F)

Viscosity: (odorless mineral spirits) 1.71 cst @ 25°C (77°F)

pH: (odorless mineral spirits) Essentially neutral

Pour, Congealing or Melting Point: (odorless mineral spirits) Less than 18°C (0°F) Pour Point by ASTM D 445

10. STABILITY AND REACTIVITY

Stability: This product is stable and will not react violently with water. Hazardous polymerization will not occur.

Materials to avoid: Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hyperchlorite, calcium hyperchlorite, etc. as this presents a serious explosion hazard

11. TOXICOLOGICAL INFORMATION

Nature of Hazard and Toxicity Information: Prolonged or repeated skin contact with this product tends to remove skin oils, possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a “corrosive” nor an “irritant” by OSHA criteria.

Product contacting the eyes may cause eye irritation.

Odorless mineral spirits has a low order of acute oral and dermal toxicity, but minute amounts aspirated into the lungs during ingestion of vomiting may cause mild to severe pulmonary injury and possibly death.

Odorless mineral spirits is judged to have an acute oral LD50 (rat) greater than 5 g/kg of body weight, and an acute dermal LD 50 (rabbit) greater than 3.16 g/kg of body weight.

12. ECOLOGICAL INFORMATION

Do not discharge this product into public waters or waterways unless authorized by a National Pollution Discharge Elimination System (NPDES) permit issued by the Environmental Protection Agency (EPA).

13. DISPOSAL RECOMMENDATIONS

Options for disposal of this product may depend on the conditions under which it was used. To determine the proper method of disposal, refer to RCRA (40 CFR 261), as well as federal EPA and state and local regulations

Please refer to Sections 5,6 and 15 for additional information.

14. TRANSPORT INFORMATION

Transportation Incident Information: For further information related to spills resulting from transportation incidents, refer to latest Department of Transportation Emergency Response Guidebook for Hazardous Materials Incidents.

U.S. DOT Hazardous Material Shipping Description

Transported by highway or rail:

Non-bulk packagings **(**capacity less than or equal to 119 gallons) Not regulated

Transported by air or marine vessel:

Bulk or non-bulk packagings Petroleum Distillates, n.o.s., 3, UN1268, III

15. REGULATORY INFORMATION

U.S. Federal Regulations: The following information may be useful in complying with various state and federal laws and regulations under various environmental statutes:

Threshold Planning Quantity (TPQ), EPA Regulation 40 CFR 355 (SARA sections 301–304)
No TPQ for product or any constituents greater than 1% or 0.1% (carcinogen).

Toxic Chemical Release Reporting, EPA Regulation 40 CFR 372 (SARA section 313)
No toxic chemical is present greater than 1% or 0.1% (carcinogen).

Hazardous Chemical Reporting, EPA Regulation 40 CFR 370 (SARA sections 311-312)
EPA Hazard Classification Code: Fire

16. OTHER INFORMATION

Date Issued: October 28, 2002
Supersedes Date November 12, 1999
MSDS0523

Notice: The information in this data sheet has been assembled by the manufacturer based on its own studies and on the work of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) to the vendee, the vendee's employees or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of such information. Persons obtaining shall make their own determination as to the suitability of the product for their particular use.