

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: PRO-PAR CLEARANT

Catalog numbers: 510, 511, 515, 519

General use: Clearing agent in histology and surgical pathology.

Product Description: Blend of aliphatic (paraffinic) hydrocarbons.

Manufacturer

Anatech Ltd.
 1020 Harts Lake Road
 Battle Creek, MI 49037
 USA

Emergency contact information

Health:	Anatech Ltd.	800-262-8324	8 am - 5 pm ET, M-F
Transportation:	CHEMTREC	800-424-9300	24 hours

2. COMPOSITION AND INFORMATION ON INGREDIENTS

(Note: Percentage composition and CAS# are withheld as a trade secret.)

Component

Paraffinic solvent

Exposure limits

196 ppm based on total hydrocarbon
 (manufacturer's recommendation, 8 hour TWA)

Propylene glycol ether

100 ppm (OSHA, NIOSH, ACGIH 8 hour TWA)
 150 ppm (ACGIH 15 minute STEL)

3. HAZARDS IDENTIFICATION

Emergency overview

Clear, colorless liquid; faint characteristic odor.

Prolonged or repeated skin contact removes skin oils which may lead to irritation and dermatitis. Inhalation of high vapor concentrations causes headaches, dizziness, drowsiness and other central nervous system effects.

Potential health effects

(Human health effects only; animal effects in Section 11: Toxicological Information)

Primary route(s) of exposure: Eyes, skin and inhalation.

Inhalation: Inhalation of high vapor concentrations (> 1,000 ppm) may cause headaches, dizziness, drowsiness, and other central nervous system effects.

Eye: Contact of liquid or vapor with eyes may cause irritation.

Skin: Prolonged or repeated skin contact removes skin oils which may lead to irritation and dermatitis.

Ingestion: Minimal toxicity. Aspiration of small amounts may cause mild to severe pulmonary damage.

3. HAZARDS IDENTIFICATION (continued)

Chronic effects: Prolonged or repeated contact with skin aggravates existing dermatitis conditions.

Signs and symptoms: Inhalation may cause headaches, dizziness and drowsiness. Affected skin will appear dry and cracked. Eyes show general signs of irritation.

4. FIRST AID MEASURES

Inhalation: Remove victim to fresh air if coughing or difficulty in breathing is experienced. Consult a physician if symptoms persist or worsen. Administer oxygen or artificial respiration as needed.

Eye: Flush eyes for at least 15 minutes in an eyewash station. If symptoms persist after washing, consult a physician.

Skin: Remove contaminated clothing, including footwear; wash before reuse or discard. For minor exposure, wash affected area with water and mild soap, rinsing thoroughly; apply a good quality skin lotion. In cases of prolonged, repeated or extensive exposure, rinse affected area or entire body for at least 15 minutes. For severe conditions, consult a physician.

Ingestion: Call a poison control center immediately. If victim is conscious, have him/her drink several glasses of water to dilute the solution. Induce vomiting only upon the advice of a physician or poison control authority.

5. FIRE FIGHTING MEASURES

Flammable properties

Flash point: 104°F (40°C), closed-cup.

Flammable limit: Not determined.

Autoignition temperature: Not determined.

Flammability classification: Combustible liquid (OSHA).

Flame propagation: Liquid is volatile and gives off vapors that may settle in low areas or travel to an ignition source.

Hazardous products of combustion: None.

Extinguishing media: ABC rated portable fire extinguishers should be used. Professional fire fighters may use water spray, dry chemical or carbon dioxide.

Fire fighting instructions: Sealed chemical suits and self contained breathing apparatus are necessary for fighting fires involving substantial volumes of this product.

6. ACCIDENTAL RELEASE MEASURES

The size of a spill is defined in part by the local situation, especially regarding ventilation. At room temperature in a well ventilated room, a few hundred milliliters might be considered a small spill. Vapors are generated during a spill and may exceed manufacturer's recommended exposure limits. Wear protective gloves, rubber boots, impermeable aprons and full-face respirators. Use dry paper towels to remove spilled liquid. Discard absorbents and other contaminated solids in a receptacle suitable for hazardous chemical waste. Have a licensed waste hauler remove contaminated solids.

6. ACCIDENTAL RELEASE MEASURES (continued)

With large spills, evacuate the area and have an emergency response team perform the cleanup. Have a licensed waste hauler remove contaminated solids and recovered liquid.

Comply with all applicable governmental regulations on spill reporting and on the handling and disposal of hazardous waste.

7. HANDLING AND STORAGE

Handling: Wear a plastic or rubber apron, protective gloves and splash-proof goggles. Avoid contact with skin and eyes. Do not continue to wear contaminated clothing after a spill. With large volumes (55 gallon drum), material will accumulate static charges which may cause an electrical spark. Use proper grounding procedures.

Storage: Store at room temperature.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls: Good general room ventilation is essential. Product should be used with local ventilation (fume hood).

Personal protective equipment

Respiratory protection: A NIOSH-approved respirator suitable for organic vapors must be used if vapor levels exceed the exposure limits.

Skin protection: Anatech Ltd. recommends nitrile gloves. Do not use latex surgical gloves for protection against any hazardous liquid. An eyewash station and safety shower must be nearby, preferably in the same room, no more than 10 seconds away.

Eye protection: Use splash-proof goggles. Do not use safety glasses. If a face shield is worn as protection against biohazards, splash-proof goggles also must be used. An eyewash station and safety shower must be nearby, preferably in the same room, no more than 10 seconds away.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless.

Odor: Characteristic.

Physical state: Liquid.

pH: Not applicable.

Vapor pressure: Not determined.

Vapor density: Not determined.

Boiling point: 311°F - 356°F (155°C - 180°C).

Freezing point: Not determined.

Solubility in water: Negligible.

Specific gravity: 0.7526 at 21°C.

10. STABILITY AND REACTIVITY

Chemical stability: Stable.

Conditions to avoid: Keep away from heat, sparks, static electricity and flames.

Incompatibility with other materials: Strong oxidants.

Hazardous decomposition products: None.

Hazardous polymerization: None.

11. TOXICOLOGICAL INFORMATION

Acute eye effects: None known.

Acute skin effects: OSHA considers chemicals to be toxic if their LD₅₀ is at or below 500 mg/kg. LD₅₀ is the dose killing 50% of the test animals in a given time (usually 4 hours). LD₅₀ of the aliphatic component in rabbits was greater than 3.16 g/kg.

Acute oral effects: OSHA considers chemicals to be toxic if their LD₅₀ is at or below 500 mg/kg. LD₅₀ is the dose killing 50% of the test animals in a given time (usually 4 hours). LD₅₀ of the aliphatic component was greater than 5 g/kg in rats.

Acute inhalation effects: None known.

Chronic effects/carcinogenicity: No evidence of carcinogenicity.

Teratology: None known.

Reproductive effects: None known.

Mutagenicity: None known.

12. ECOLOGICAL INFORMATION

No environmental data available.

13. DISPOSAL CONSIDERATIONS

Pro-Par Clearant is ignitable and should be disposed via a licensed waste hauler. Do not mix waste streams unless instructed to do so by your waste hauler.

Pro-Par Clearant is recyclable.

Canadian disposal regulations generally parallel those in the United States.

Regardless of the method chosen for disposal, be sure to follow federal, state (provincial) and local regulations. Proper waste disposal is the generator's responsibility.

14. TRANSPORTATION INFORMATION

Packaging for hazardous air shipments must meet the specifications as required by the current edition of *International Air Transportation Association (IATA) Dangerous Goods Regulations*.

DOT (ground): Not regulated.

DOT (air) and IATA: **Proper Shipping Name:** Petroleum products, n.o.s. (naphtha solvent)
UN #: 1268
Hazard Class: 3
Packing Group: III

15. REGULATORY INFORMATION

OSHA (USA): Under the Hazard Communication Standard and the Laboratory Standard, Pro-Par Clearant is a hazardous material: it is combustible.

The two OSHA Standards cited above mandate that exposed workers receive proper training in the properties of this product, work practices involved with its handling and disposal, and interpretation of its MSDS.

FDA (USA): Pro-Par Clearant is for in vitro diagnostic use as a clearant in histology.

EPA (USA): For disposal purposes Pro-Par Clearant is ignitable. It is a reportable substance under SARA Title III.

16. OTHER INFORMATION

Label warnings: Combustible. Keep from heat and open flames. Avoid extensive or repeated contact with skin. Removed contaminated clothing. Avoid contact with eyes. Use with adequate ventilation. If swallowed, contact a physician.

NFPA (National Fire Protection Association) Rating:

General note: This rating is applicable only to safeguard the lives of individuals who may be concerned with fires occurring in an industrial plant or storage location. The ratings provide information to emergency personnel on whether to evacuate the area or how to perform control procedures. It is not descriptive of hazards under normal conditions of occupational use, and is even less applicable to anticipated laboratory-scale use.

Health 1: Materials that, under emergency conditions, can cause significant irritation.

Flammability 2: Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

Instability 0: Materials that are normally stable even under fire conditions.

This Material Safety Data Sheet has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard. It conforms to the provisions of the American National Standards Institute (ANSI) Standard Z400.1 (Standard for the Preparation of Material Safety Data Sheets). Information contained herein was obtained from sources which Anatech Ltd. believes are reliable. It is the user's responsibility to determine suitability of the product for his/her own use, and to assure proper use and disposal of it to protect the safety and health of employees and the protection of the environment.