

# MATERIAL SAFETY DATA SHEET



Conforms to 93/112/EC and ISO 11014-1

## 1. Chemical Product and Company Identification

**Product Name:** OptiClear E

**Product Number:** OE-104

### Chemical Names/

### Description:

Aliphatic Hydrocarbon

### Manufacturer

National Diagnostics  
305 Patton Drive  
Atlanta, GA 30336

### Telephone Numbers

(800) 526-3867  
(404) 699-2121

### Emergency Numbers

#### Chemtrec

**(800) 424-9300 (U.S. & Canada)**  
**01-703-527-3887 (outside U.S. & Canada)**

## 2. Composition/Information on Ingredients

Component	% Comp.	CAS #	EINECS #	TLV (Units)
Aliphatic Hydrocarbons	100	68920-06-9		400 ppm

## EEC LABEL SYMBOL AND CLASSIFICATION



**R: 11-38**

**Highly flammable. Irritating to skin.**

**S: (2-) 16-23-24-6**

**Keep out of the reach of children. Keep away from sources of ignition -- no smoking. Do not breathe fumes. Avoid contact with the skin. If swallowed, do not induce vomiting. Seek medical advice immediately and show this container or label.**

## 3. Hazards Identification

### Appearance and Odor

Clear, colorless liquid

### EMERGENCY OVERVIEW - IMMEDIATE HAZARD

HIGHLY FLAMMABLE. PRODUCT IS SLIGHTLY IRRITATING TO EYES (NO INJURY).

HIGH VAPOR MAY CAUSE RESPIRATORY TRACT IRRITATION, HEADACHE, DIZZINESS, ANESTHESIA, DROWSINESS, UNCONSCIOUSNESS, OR DEATH. INGESTION: MINIMAL TOXICITY. ASPIRATION MAY LEAD TO PULMONARY INJURY AND DEATH.

**EMERGENCY OVERVIEW - CHRONIC HAZARD WARNING:**

NO CHRONIC HAZARDS SUSPECTED.

**Potential Health Effects**

**Inhalation**

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

**Ingestion**

Minimal toxicity by ingestion, though small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

**Skin**

Low order of toxicity. Frequent or prolonged contact may irritate and cause dermatitis. Skin contact may aggravate an existing dermatitis condition.

**Eyes**

Slightly irritating but does not injure eye tissue.

**Signs and Symptoms of Overexposure**

**Inhalation**

Headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

**Ingestion**

Minimal toxicity by ingestion.

**Skin**

Dermatitis may occur with frequent or prolonged contact.

**Eyes**

Product is only slightly irritating to eye tissue, non injurious.

**Carcinogenicity**

Not listed by NTP, IARC, or OSHA.

**Mutagenicity**

No information available.

**Reproductive Toxicity**

No information available.

**Teratogenic Effects**

No information available.

**Routes of Entry**

Inhalation or by skin contact.

**Target Organ Statement**

No information available.

**4. First Aid Measures**

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Ingestion**

Do not induce vomiting. If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

### **Skin**

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

### **Eyes**

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

## **5. Fire Fighting Measures**

Flash Point	45F (7C)	Flammable Limits	LEL: 1.3%; UEL: 10.2% @ 77 F
Flash Point Method	TCC	Autoignition temperature	720 F

### **Extinguishing media**

Dry powder, foam, carbon dioxide. (Water may be ineffective.)

### **Protective Equipment**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### **Hazardous Combustion Products**

Thermal decomposition products may include carbon monoxide, carbon dioxide, and hydrocarbons.

### **Unusual Fire and Explosion Hazards**

Flammable liquid. Vapor forms explosive mixtures with air. Vapor may travel considerable distances to ignition source and flash back.

NFPA Codes: Health 1 Flammability 3 Reactivity 0

## **6. Accidental Release Measures**

### **Steps to be taken in case material is released or spilled**

Eliminate source of ignition. Ventilate area. Cover with absorbent material (soda ash) to confine spill and sweep or shovel into container. Close container tightly. Avoid breathing vapors.

### **Waste Disposal Method**

Disposal must be made in accordance with applicable federal, state, and local regulations.

### **Personal Precautions**

Wear appropriate protective equipment as specified in section 8.

## **7. Handling and Storage**

### **Handling**

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Transfer methods should avoid static sparks. Use explosion proof ventilation.

### **Storage**

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage. Isolate from incompatible materials (section 10).

### **Storage Temperature**

Room Temperature

## Disposal

Observe all national, state, and local regulations regarding product disposal. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids).

## 8. Exposure Controls/Personal Protection

### Airborne Exposure Limits

Component: Aliphatic Hydrocarbons

ACGIH Threshold Limit Value (TLV): 400 ppm

OSHA Permissible Exposure Limit (PEL):

### Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborn Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

### Respiratory Protection

If the exposure limit is exceeded, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus.

### Eye Protection

Safety glasses.

### Skin Protection

Wear protective gloves and clean body covering clothing.

### Other Control Measures

Use explosion-proof ventilation equipment. Special care is required given the highly flammable nature of this material.

## 9. Physical Properties

**Boiling point** 244 - 284 F

**Evaporation Rate** 1.6 (n-Bu Acetate=1)

**Melting point** Less than -76

**Solubility in water** Less than 0.01% @77F

### Vapor

**pressure (mmHg)** 36 mmHg @ 68 F

**pH** N.A.

**Vapor density (Air = 1)** 3.9

**Specific gravity (H2O = 1)** 0.72 @ 60 F

**% Volatile by volume** 100

## 10. Stability and Reactivity

### Stability

Stable under normal conditions of use.

### Conditions to Avoid

Heat, sources of ignition.

## Hazardous Decomposition Products

None

## Hazardous Polymerization

Will not occur

## Incompatibles

Aliphatic Hydrocarbons:

Strong oxidizing agents.

## 11. Toxicological Information

### Product LD50 Values

OptiClear E	Oral Rat LD50 (mg/kg):	Minimal toxicity by ingestion.
OptiClear E	Dermal Rabbit LD50 (mg/kg):	Minimal toxicity by skin contact.

### Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Aliphatic Hydrocarbons	No	No	None

## 12. Ecological Information

### Aliphatic Hydrocarbons

No specific ecological data is available for this material. Please refer to Section 6 for information regarding accidental releases.

## 13. Disposal Considerations

Observe all national, state, and local regulations regarding product disposal. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids).

## 14. Transport Information

### D.O.T.

Proper Shipping Name: Petroleum Products N.O.S.

Hazard Class: 3

UN Number: 1268

Packing Group: 3

### I.A.T.A.

Proper Shipping Name: Petroleum Products N.O.S.

Hazard Class: 3

UN Number: 1268

Packing Group: 3

### I.M.O.

Proper Shipping Name: Petroleum Products N.O.S.

Hazard Class: 3

UN Number: 1268

Packing Group: 3

## 15. Regulatory Information

### United States

#### TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

#### SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Aliphatic Hydrocarbons	Yes	No	No	No	No

### Europe

#### EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

#### EEC LABEL SYMBOL AND CLASSIFICATION



**R: 11-38**

**Highly flammable. Irritating to skin.**

**S: (2-) 16-23-24-6**

**Keep out of the reach of children. Keep away from sources of ignition -- no smoking. Do not breathe fumes. Avoid contact with the skin. If swallowed, do not induce vomiting. Seek medical advice immediately and show this container or label.**

## 16. Other Information

**NFPA Codes: Health 1 Flammability 3 Reactivity 0**

MANUFACTURER DISCLAIMER: The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.