

**MATERIAL SAFETY DATA SHEET**

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: **Histo-Clear II**  
 CHEMICAL NAMES/Mixture of alkyl hydrocarbons and essential oils  
 DESCRIPTION:

PRODUCT NUMBER: HS-202

MANUFACTURER: National Diagnostics, Inc  
 305 Patton Drive  
 Atlanta, GA 30336

TELEPHONE NUMBER:  
 (800) 526-3867  
 (404) 699-2121  
 EMERGENCY NUMBER:  
 CHEMTREC (800) 424-9300

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	% Comp	CAS #	EINECS #	TLV (units)
Aliphatic Hydrocarbons	70 - 90			300 ppm
Distilled essential oils - food grade	10 - 30			GRAS



**IRRITANT**

EEC LABEL SYMBOL AND CLASSIFICATION  
 R: 10-38  
 Flammable. Irritating to skin.  
 S: (2-) 23-62  
 Keep out of the reach of children. Do not breath fumes. If swallowed, do not induce vomiting. Seek medical advice immediately and show this container or label.

**3. HAZARDS IDENTIFICATION**

APPEARANCE AND ODOR: Clear and colorless liquid

EMERGENCY OVERVIEW - IMMEDIATE HAZARD PRODUCT IS SLIGHTLY IRRITATING TO EYES (NO INJURY). HIGH VAPOR MAY CAUSE RESPIRATORY TRACT IRRITATION, HEADACHE, DIZZINES, 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 or 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: 104°F

FLAMMABLE LIMITS: LEL 1.2%; UEL 9.6%

FLASH POINT METHOD: TCC

AUTOIGNITION TEMPERATURE: 559 F (approximate)

#### 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: 2 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): 300 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**

N.A.

**9. PHYSICAL PROPERTIES**

Boiling Point	325 - 360 F	Evaporation Rate	0.3 (n-Bu Acetate=1)
Melting Point	Less than -68 F	Solubility in Water	Less than 0.01% @ 77 F
Vapor Pressure mm HG	2 mmHg @ 68 F	pH	N.A.
Vapor Density Air = 1	4.94	Specific Gravity (H2O=1)	0.75 @ 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

Distilled essential oils - food grade

Avoid contact with strong acids, alkalis, or oxidizing agents.

**11. TOXICOLOGICAL INFORMATION****PRODUCT LD50 VALUES**

Histo-Clear II	Oral Rat LD50 (mg/kg):	Minimal toxicity by ingestion.
Histo-Clear II	Dermal Rabbit LD50 (mg/kg):	Minimal toxicity by skin contact.

**COMPONENT CANCER LIST STATUS**

Component	NTP Carcinogen		IARC Category
	Known	Anticipated	
Aliphatic Hydrocarbons	No	No	None
Distilled essential oils - food grade	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.

Distilled essential oils - food grade.

No information available on the ecological fate of this material.

**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**

Domestic (D.O.T.)

Proper Shipping Name: Not regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

International (I.A.T.A. / 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:

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
Distilled essential oils - food grade	Yes	No	No	No	No

**EUROPE**

EEC Regulatory:

All intentional ingredients are listed on the European EINECS Inventory.

**EEC LABEL SYMBOL AND CLASSIFICATION**



**IRRITANT**

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Flammable. Irritating to skin.

S: (2-) 23-62  
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**16. OTHER INFORMATION**

NFPA CODES: Health: 1 Flammability: 2 Reactivity: 0

MANUFACTURER DISCLAIMER: The information given herein is offered in good faith as accurate, but without guarantee. Conditions of 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.