SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier
   Product Name: Histo-Clear                  Product Number: HS-200

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against
   Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet
   Manufacturer: National Diagnostics
   305 Patton Drive
   Atlanta, GA 30036
   (404) 699-2121
   info@nationaldiagnostics.com

   Agent: AGTC Bioproducts
   Unit 4 Fleet Business Park
   Itlings Lane, Hessle
   East Riding of Yorkshire HU139LX
   44(0) 1482 646020
   office@agtcbioproducts.com

1.4 Emergency Telephone Number
   Chemtrec
   1-800 424-9300 (U.S. & Canada)
   01-703-527-3887 (outside U.S. & Canada)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture
   Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]
   H226 - Flammable Liquids (Category 3)
   H315 - Skin Corrosion/Irritation (Category 2)
   H317 - Skin Sensitizer (Category 1)
   H410 - Chronic Hazards to the Aquatic Environment (Category 1)

2.2 Label Elements
   GHS LABEL ELEMENTS AND CLASSIFICATION
   DANGER
   H226 - Flammable liquid and vapor.
   H315 - Causes skin irritation.
   H317 - May cause an allergic skin reaction.
   H410 - Very toxic to aquatic life with long lasting effects.
   P273 - Avoid release to the environment.
   P280 - Wear protective gloves/protective clothing/eye protection/face protection.
   P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
   P331 - Do NOT induce vomiting.
   P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
   P333+P313 - IF SKIN irritation or rash occurs: Get medical advice/attention.
   P501 - Dispose of contents/containers to an approved waste disposal plant.

2.3 Other Hazards
   None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance
   Chemical Names/Description
   Distilled essential oils - food grade

Chemical Formula
SECTION 4 - FIRST AID MEASURES

4.1 Description of 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**
Remove contact lenses at once. Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

**Inhalation**
May include dizziness, headaches, and nasal irritation.

**Ingestion**
May include nausea, vomiting, and headache.

**Skin**
May include drying and redness (dermatitis) of the skin.

**Eyes**
May include redness, itching, and watering of the eyes.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

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

5.2 Special Hazards Arising from the Substance/Mixture

**Hazardous Combustion Products**
Thermal decomposition products may include carbon monoxide, carbon dioxide, and hydrocarbons.

**Hazardous Decomposition Products**
Carbon monoxide and unidentified organic compounds may be formed during combustion.

**Hazardous Polymeriation**
Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

5.3 Advice for Firefighters
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.

5.4 Further Information
No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions
Wear appropriate protective equipment as specified in Section 8.
6.2 Environmental Precautions
Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up
Eliminate source of ignition. Ventilate area. Cover with absorbent material (soda ash) to confine spill and sweep or shovel into container. Close container tightly.

6.4 References to Other Sections
For disposal information, see Section 13. For Protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE
7.1 Precautions for Safe Handling
Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

7.2 Conditions for Safe Storage (including any incompatibles)
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.

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

7.3 Specific End Uses
Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS
8.1 Control Parameters
ACGIH Threshold Limit Value (TLV): None established
OSHA Permissible Exposure Limit (PEL): None established

8.2 Exposure Controls
Engineering Controls
Local exhaust should be adequate.

Respiratory Protection
Not expected to require personal respirator usage, but if vapor concentration becomes high, use approved self-contained air mask.

Eye Protection
Safety glasses.

Skin Protection
Wear protective gloves and clean body covering clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on Basic Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Appearance</td>
<td>Colorless, mobile liquid</td>
</tr>
<tr>
<td>c. Odor Threshold</td>
<td>N.A.</td>
</tr>
<tr>
<td>e. Melting/Freezing Point (°C)</td>
<td>0</td>
</tr>
<tr>
<td>g. Flash Point (°C)</td>
<td>49</td>
</tr>
<tr>
<td>i. Flammability</td>
<td>Combustible</td>
</tr>
<tr>
<td>k. Vapor Pressure</td>
<td>6.0 mm HG @ 25 C</td>
</tr>
<tr>
<td>m. Relative Density</td>
<td>0.85 kg/L @ 25 C</td>
</tr>
<tr>
<td>o. Partition Coefficient</td>
<td>log Kow=4.38</td>
</tr>
<tr>
<td>q. Decomposition Temperature</td>
<td>No decomposition if used</td>
</tr>
<tr>
<td>s. Explosive Properties</td>
<td>No Data</td>
</tr>
<tr>
<td>b. Odor</td>
<td>Citrus odor</td>
</tr>
<tr>
<td>d. pH</td>
<td>N.A.</td>
</tr>
<tr>
<td>f. Boiling point (°C)</td>
<td>179</td>
</tr>
<tr>
<td>j. Upper/Lower Flammability or</td>
<td>L.E.L 0.7%; U.E.L. 6.1%</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td></td>
</tr>
<tr>
<td>l. Vapor Density (Air = 1)</td>
<td>4.94 (air = 1)</td>
</tr>
<tr>
<td>n. Water Solubility</td>
<td>Insoluble</td>
</tr>
<tr>
<td>p. Autoignition Temperature</td>
<td>N.A.</td>
</tr>
<tr>
<td>r. Viscosity</td>
<td>No data</td>
</tr>
<tr>
<td>t. Oxidizing Properties</td>
<td>No Data</td>
</tr>
</tbody>
</table>

SECTION 10 - STABILITY AND REACTIVITY
10.1 Reactivity
Avoid contact with strong acids and strong oxidizing agents. Avoid heat and ignition conditions.

10.2 Chemical Stability
Stable under normal conditions of use. Incompatible with strong oxidizing agents.

10.3 Possibility of Hazardous Reactions
Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

10.4 Conditions to Avoid
Heat, sources of ignition.

10.5 Incompatible Materials
Avoid contact with strong acids, alkalis, or oxidizing agents.

10.6 Hazardous Decomposition Products
Carbon monoxide and unidentified organic compounds may be formed during combustion.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values
Oral Rat LD50 (mg/kg)
GRAS (Generally Regarded As Safe)

Dermal Rabbit LD50 (mg/kg)
GRAS (Generally Regarded As Safe)

Component Cancer List Status

<table>
<thead>
<tr>
<th>Component</th>
<th>NTP Carcinogen</th>
<th>IARC Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>d-limonene</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

Potential Health Effects

Inhalation
Inhalation can cause nose, throat, and respiratory tract irritation. Prolonged exposure to high vapor or mist concentrations may cause dizziness, headaches, and nasal irritation.

Ingestion
Ingestion may cause vomiting, headache, and other medical problems.

Skin
Repeated or prolonged contact can cause redness, irritation, and scaling of the skin (dermatitis). Normal care and personal hygiene should prevent skin effects.

Eyes
Eye irritation may occur with exposure to concentrated vapors or contact with product.

Carcinogenicity
None of the components of this material are listed by NTP, OSHA, ACGIH, or IARC as a carcinogen or a suspected carcinogen.

Mutagenicity
No information available.

Reproductive Toxicity
No information available.

Teratogenic Effects
No information available.

Routes of Entry
May be absorbed through the skin, by inhalation, or by ingestion.

Target Organ Statement
SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

<table>
<thead>
<tr>
<th></th>
<th>Vertebrates</th>
<th>Invertebrates</th>
<th>Algae</th>
<th>Microorganisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Toxicity</td>
<td>LC50 (96hr fathead minnow): 720ug/L</td>
<td>EC50 (48hrs, Daphnia) 0.36mg/L</td>
<td>EC50 (72hrs) 8mg/L</td>
<td>EC50 (3hr) 209mg/L</td>
</tr>
<tr>
<td>Terrestrial Environment Toxicity</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
</tr>
</tbody>
</table>

12.2 Persistence and Degradability

Readily biodegradable

12.3 Bioaccumulative Potential

BCF is 1022 L/kg (calculated)

12.4 Mobility in Soil

Koc of d-limonene (predicted): 1984 L/kg.

12.5 Results of PBT and vPvB Assessment

Not a PBT or vPvB

12.6 Other Adverse Effects

No data

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>ADR/RID</th>
<th>IATA</th>
<th>IMO</th>
<th>DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN Number 2319</td>
<td>2319</td>
<td>2319</td>
<td>2319</td>
</tr>
<tr>
<td>14.2 Shipping Name Terpene Hydrocarbons, N.O.S. ( d-limonene )</td>
<td>Terpene Hydrocarbons, N.O.S. ( d-limonene )</td>
<td>Terpene Hydrocarbons, N.O.S. ( d-limonene )</td>
<td>Terpene Hydrocarbons, N.O.S. ( d-limonene )</td>
</tr>
<tr>
<td>14.3 Hazard Class 3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>14.4 Packing Group III</td>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental Hazards N.A.</td>
<td>N.A.</td>
<td>Marine pollutant</td>
<td>N.A.</td>
</tr>
<tr>
<td>14.6 Special Precautions N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

United States

TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Component</th>
<th>Fire</th>
<th>Pressure</th>
<th>Reactivity</th>
<th>Acute</th>
<th>Chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>d-limonene</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Europe

EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION

Revisional Updates

5/29/2015 - Updated Sections 2.1 and 3.1
4/29/2013 - Released Version 1.0

NFPA Codes

Health 1 Flammability 2 Reactivity 0
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