SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Duquenois-Levine Reagent
PRODUCT NUMBER(S): 7608 (1006035)  
DATE: October 22, 2012

TRADE NAME: NarcoPouch®  
GENERAL USE: Presumptive Test Kit for THC
CHEMICAL FAMILY: Ethanol/Vanillin/Acetaldehyde/HCl
PRODUCT DESCRIPTION:
1st Ampoule – Clear liquid; 2nd ampoule – Clear fuming liquid acrid odor (HCl).

MANUFACTURED FOR:
Safariland LLC
ADDRESS (NUMBER, STREET, P.O. BOX): 13386 International Parkway
(CITY, STATE AND ZIP CODE): Jacksonville, FL 32218
COUNTRY: USA

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Irritation of eyes, nose, and throat. Splashes in the eyes or on the skin will cause severe skin burns. Inhalation of acid vapors may be injurious to the lungs. Repeated or prolonged exposure to dilute solutions of acid may cause irritation of the skin. Repeated or prolonged exposure to mists or vapors of Hydrochloric Acid may cause erosion of teeth, chronic irritation of the eyes, or chronic inflammation of the nose, throat, and bronchial tubes. 2 ppm (9.78 mg/m3) 60 minute ceiling NIOSH.

POTENTIAL HEALTH EFFECTS

INHALATION:
Irritation of throat. Inhalation of acid vapors may be injurious to the lungs and with repeated inhalation chronic irritation/inflammation of nose, throat, and bronchial tubes.

SKIN:
Irritation and or burns by direct contact. Delayed onset contact dermatitis is also possible with chronic repeated exposure to ampoule 1 chemicals.

EYES:
Chronic irritation of eyes, corneal burns are possible with exposure to Hydrochloric Acid (Ampoule 2).

INGESTION:
Severe irritation and ulceration of the gastrointestinal tract. Vomiting and diarrhea are also symptoms.

CARCINOGENICITY:
NTP? Yes, Acetaldehyde.  
IARC MONOGRAPHS? Yes,75-07-0  
OSHA REGULATED? No  
CALIFORNIA, Prop.65? Yes  
ESIS? Yes CAS #75-07-0 EINECS #200-836-8 Acetaldehyde=Limited evidence of carcinogenic effect.

SECTION 3 - HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>% (by Weight)</th>
<th>CAS #</th>
<th>EINECS #</th>
<th>Hazard Symbol</th>
<th>RISK PHRASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 1st ampoule</td>
<td>90.3</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>F</td>
<td>R11</td>
</tr>
<tr>
<td>Vanillin: 1st ampoule</td>
<td>2.4</td>
<td>121-33-5</td>
<td>204-465-2</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Acetaldehyde: 1st ampoule</td>
<td>1.3</td>
<td>75-07-0</td>
<td>200-836-8</td>
<td>F+, Xi, Xn</td>
<td>R12, R36/37, R40</td>
</tr>
<tr>
<td>Hydrochloric Acid, 2nd Ampoule</td>
<td>100%</td>
<td>7647-01-0</td>
<td>231-595-7</td>
<td>T, C, Xi</td>
<td>R23, R35, R37</td>
</tr>
</tbody>
</table>

Notes: Hazard symbols and risk phrases based on maximum listed concentration of each hazardous ingredient.

SECTION 4 - FIRST AID MEASURES

INHALATION:
Remove to fresh air, apply CPR if victim is unconscious, administer oxygen, seek immediate medical attention.

EYES:
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek immediate medical attention.

SKIN:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention.

INGESTION:
If swallowed, give plenty of water to dilute substances, do not induce vomiting; if conscious, give large quantities of water immediately to dilute the Hydrochloric Acid. If vomiting occurs spontaneously, keep the head below the waist to avoid aspiration. Call a physician immediately.
**SECTION 5 - FIRE FIGHTING MEASURES**

GENERAL HAZARDS:
Hydrochloric Acid, 2nd Ampoule is highly corrosive to most metals with evolution of flammable Hydrogen gas.

EXTINGUISHING MEDIA:
Use extinguishing media appropriate for surrounding fire and foam, CO2 or dry chemical for Ethanol in Ampoule 1.

FIRE FIGHTING PROCEDURES:
None applicable, not flammable.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Under fire conditions wearing NIOSH/MSA or European EN-149 approved SCBA's or acid gas=organic vapor respirators is required.

HAZARDOUS COMBUSTION PRODUCTS:
Hydrogen Chloride gas, Hydrogen Cyanide gas, sulfur oxides, and organic vapors.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Wear protective equipment; ventilate area; cover a Hydrochloric Acid spill with sodium carbonate. Add water if necessary to form a slurry. Scoop up slurry. Can use ODV part number 910 soda ash.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Store and handle according to packaged instructions. Store in cool, well ventilated area. Keep away from reactive materials. Avoid breathing vapor and prevent vapor accumulation in enclosed areas.

**SECTION 7 - HANDLING AND STORAGE**

RECOMMENDED STORAGE:
Store and handle according to packaged instructions. Store in cool, well ventilated area. Keep away from reactive materials.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENTS</th>
<th>TLV/TWA ppm</th>
<th>TWA mg/m3</th>
<th>STEL ppm</th>
<th>STEL mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 1st ampoule</td>
<td>1000</td>
<td>1900</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Vanillin: 1st ampoule</td>
<td>NE</td>
<td>NE</td>
<td>2</td>
<td>NE</td>
</tr>
<tr>
<td>Acetaldehyde: 1st ampoule</td>
<td>25</td>
<td>2000 IDLH</td>
<td>25 Ceiling</td>
<td>200 360</td>
</tr>
<tr>
<td>Hydrochloric Acid, 2nd Ampoule.</td>
<td>2</td>
<td>50 IDLH</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

**PERSONAL PROTECTION**

RESPIRATORY PROTECTION:
NIOSH/MSA or European EN-149 approved acid gas respirator for a minor Hydrochloric Acid spill clean-up or a NIOSH/MSA or European EN-149 approved organic vapor respirator.

PROTECTIVE GLOVES:
Impervious gloves (neoprene, nitrile) required when any contact potential with contents exists.

EYE PROTECTION:
Do not get in eyes, wear safety glasses with side shield splash protection or chemical goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
An eye wash fountain and safety shower should be readily available where the potential for contact exists.

WORK / HYGIENIC PRACTICES:
Wash thoroughly after handling. Be prepared to neutralize and absorb spilled acid.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>APPEARANCE AND ODOR</strong></td>
<td></td>
</tr>
<tr>
<td>1st Ampoule – Clear liquid; 2nd ampoule – Clear fuming liquid acrid odor (HCl).</td>
<td></td>
</tr>
<tr>
<td><strong>VAPOR PRESSURE</strong></td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>NE</td>
</tr>
<tr>
<td>Volatility</td>
<td>NE</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY (WATER = 1)</td>
<td>NR</td>
</tr>
<tr>
<td><strong>BOILING POINT / BOILING RANGE</strong></td>
<td></td>
</tr>
<tr>
<td>NR</td>
<td></td>
</tr>
<tr>
<td><strong>FLASH POINT</strong></td>
<td></td>
</tr>
<tr>
<td>56°F for Ethanol (Ampoule 1)</td>
<td></td>
</tr>
<tr>
<td><strong>SOLUBILITY IN WATER</strong></td>
<td></td>
</tr>
<tr>
<td>62% for Hydrochloric Acid.</td>
<td></td>
</tr>
<tr>
<td><strong>FLAMMABLE LIMITS</strong></td>
<td></td>
</tr>
<tr>
<td>LEL: NR</td>
<td></td>
</tr>
<tr>
<td>UEL: NR</td>
<td></td>
</tr>
<tr>
<td><strong>VAPOR DENSITY (AIR = 1)</strong></td>
<td></td>
</tr>
<tr>
<td>NE</td>
<td></td>
</tr>
<tr>
<td><strong>AUTO-IGNITION TEMPERATURE</strong></td>
<td></td>
</tr>
<tr>
<td>NR</td>
<td></td>
</tr>
<tr>
<td><strong>EVAPORATION RATE (BUTYL ACETATE = 1)</strong></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 10 - STABILITY AND REACTIVITY

STABILITY: STABLE

CONDITIONS TO AVOID:
Excessive heat, light exposure, contact with incompatible materials.

INCOMPATIBILITY (MATERIALS TO AVOID):
Acid contact with most metals corrodes them severely and forms flammable hydrogen gas. Contact of acid gas or liquid with any alkali or active metal may develop enough heat to cause a fire in adjacent combustible material. Cobalt (II) Thiocyanate when strongly acidified by contact with Sulfuric Acid and when also heated can produce deadly Hydrogen Cyanide gas.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
Hydrogen Chloride gas, Hydrogen Cyanide gas, sulfur oxides, and organic vapors.

HAZARDOUS POLYMERIZATION:
Will not occur.

CONDITIONS TO AVOID:
None related to polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components | CAS # | EINECS # | LD50 of Ingredient (Specify Species and Route) | LC50 of Ingredient (Specify Species)
--- | --- | --- | --- | ---
Ethanol 1st ampoule | 64-17-5 | 200-578-6 | 3450 mg/kg (ORAL, MOUSE). | NE
Vanillin: 1st ampoule | 121-33-5 | 204-465-2 | Oral, rat: LD50 = 1580 mg/kg. | NE
Acetaldehyde: 1st ampoule | 75-07-0 | 200-836-8 | Oral, rat: LD50 = 661 mg/kg. | Inhalation, rat: LC50 = 13300 ppm/4H.
Hydrochloric Acid, 2nd Ampoule | 7647-01-0 | 231-595-7 | Oral, rabbit: LD50 = 900 mg/kg. | Inhalation, rat: LC50 = 3124 ppm/1H.

SECTION 12 - ECOLOGICAL INFORMATION

Harmful to environment in large quantities. Chloroform may bioaccumulate in soil, water, and organisms.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

SECTION 14 - TRANSPORT INFORMATION

GROUND SHIPMENT WITHIN USA (DOT):
PROPER SHIPPING NAME: None - Exempted Qty.
CLASS/ PACK GROUP/ LABELING: Class3(8) with Excepted Qty. marking on package. No class 3 or 8 label required.
NOTES: When shipped under 49CFR173.4a, This product is exempt from other labeling and waybill requirements.

GROUND SHIPMENTS TO AND WITHIN CANADA (TDG):
PROPER SHIPPING NAME: None - Limited Quantity (within Canada), See above for US to Canada
CLASS/ PACK GROUP/ LABELING: Phrase "Ltd. Qty." on package. No additional requirements.
NOTES: TDG only used for shipment within Canada, shipments from the US can follow DOT regulations. See TDG Sections 1.17 and 9.

AIR SHIPMENTS (ICAO/IATA):
PROPER SHIPPING NAME: None - (Classified under UN1170 Ethanol Solution, UN 1789 Hydrochloric Acid - Overall Excepted Qty. E2)
CLASS/ PACK GROUP/ LABELING: Class3(8) with Excepted Qty. marking on package. No class 3 or 8 label required.
NOTES: This product is exempt from other labeling and waybill requirements.

OCEAN SHIPMENTS (IMDG):
PROPER SHIPPING NAME: None
CLASS/ PACK GROUP/ LABELING: Class3(8) with Excepted Qty. marking on package. No class 3 or 8 label required.
NOTES: Full documentation required.

ALL SHIPMENTS EXCEEDING EXCEPTED QUANTITY / ALTERNATIVE SHIPPING INFORMATION:
PROPER SHIPPING NAME: UN 3316, Chemical Kit
CLASS/ PACK GROUP/ LABELING: Class 9, Pack Group III. Miscellaneous Label
NOTES: Full documentation required.

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, TDG & UN information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping. Information above does not account for overpacks or outer packings with multiple hazardous materials; consult shipper when multiple materials are shipped. Consult regulations for maximum outer packaging and overpack requirements.
MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Duquenois-Levine Reagent
PRODUCT NUMBER(S): 7608 (1006035)
DATE: October 22, 2012

SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): Ingredients are listed.
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):
Acute Health: Yes Chronic Health: Yes Reactive: No
Fire: No Sudden Release of Pressure: No

313 REPORTABLE INGREDIENTS: This material contains Acetaldehyde (CAS#75-07-0) and Hydrochloric Acid (CAS# 7647-01-0) which are subject to the reporting requirements of Section 313 of SARA Title III & 40 CFR Part 373.

CERCLA (USA - Comprehensive Response Compensation and Liability Act): CAS# 75-07-0: 1000 lb final RQ; 454 kg final RQ. CAS# 7647-01-0: 5000 lb final RQ; 2270 kg final RQ.

CCPR (Canadian Controlled Products Regulations): Not Listed.


State Right to Know: Acetaldehyde: MA, NJ, PA.; Ethanol MA, NJ, PA, RI. Hydrochloric Acid ILL, MA, NJ, PA, RI.

CIDL (Canadian Ingredient Disclosure List): Not Listed.

CDSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Listed on DSL.

EINECS (European Inventory of Existing Commercial Chemical Substances): Referenced.

C: Corrosive
F: Highly Flammable
X: Harmful
T: Toxic

PHYSICAL HAZARD:
11: Highly Flammable.
20/21/22: Harmful by inhalation, in contact with skin and if swallowed.
23: Toxic by inhalation.
32: Contact with acids liberates very toxic gas.
35: Causes severe burns.
37: Irritating to skin.
40: Limited evidence of a carcinogenic effect.

SAFETY PHRASES:
S1/2: Keep locked up and out of the reach of children.
S9: Keep container in a well ventilated place.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 16 - OTHER INFORMATION

Legend:
N/A = Not Applicable
N/D = Not Determined
N/E = Not Established
N/R = Not Reported

HMIS HAZARD RATINGS
HEALTH:
3 0 = INSIGNIFICANT
0 1 = SLIGHT
0 2 = MODERATE
0 3 = HIGH
0 4 = EXTREME
PHYSICAL HAZARD:
PERSONAL PROTECTIVE EQUIPMENT:
H

REVISION SUMMARY: reviewed 10/22/2012.

MSDS Prepared by:
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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.