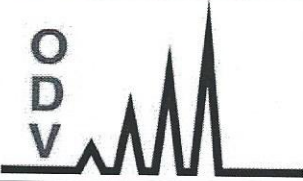



# MATERIAL SAFETY DATA SHEET

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## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b> Duquenois-Levine Reagent		<b>DATE:</b> August 1, 2011
<b>PRODUCT NUMBER(S):</b> 908 (1006324)		
<b>TRADE NAME:</b> NarcoPouch®		
<b>GENERAL USE:</b> Presumptive Test Kit for THC		
<b>CHEMICAL FAMILY:</b> Ethanol/Vanillin/Acetaldehyde/HCl		
<b>PRODUCT DESCRIPTION:</b> 1st Ampoule – Clear liquid; 2nd ampoule – Clear fuming liquid acid odor (HCl); 3rd ampoule – colorless liquid, ethereal odor (Chloroform).		
<b>MANUFACTURED FOR:</b> <b>Sarfariland LLC</b>	<b>DATE PREPARED:</b> August 1, 2011	
<b>ADDRESS (NUMBER, STREET, P.O. BOX):</b> 13386 International Parkway	<b>SUPERSEDES:</b> September 10, 2008	
<b>(CITY, STATE AND ZIP CODE):</b> Jacksonville, FL 32218	<b>TELEPHONE NUMBER FOR INFORMATION / Customer Service:</b> 800-347-1200	
<b>COUNTRY:</b> USA	<b>CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER</b>  <b>1-800-255-3924</b> <b>01-813-248-0585</b> North America Toll Free      International	

## 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/m<sup>3</sup>) 60 minute ceiling NIOSH (CHCl<sub>3</sub>) Chloroform which is listed as a carcinogen.

### 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 both ampoule 1 and ampoule 3 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-Chloroform & Acetaldehyde.** IARC MONOGRAPHS? **Yes,67-66-3; Yes,75-07-0** OSHA REGULATED? **No**  
 CALIFORNIA, Prop.65? **Yes CAS#67-66-3 (Chloroform) and CAS#75-07-0 (Acetaldehyde) are known carcinogens listed in the State of California.**  
 ESIS? **Yes CAS#67-66-3, EINECS #200-663-8 Chloroform and CAS #75-07-0 EINECS #200-836-8 Acetaldehyde=Limited evidence of carcinogenic effect.**

## SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Ethanol 1st ampoule	>95	64-17-5	200-578-6	F	R11
Vanillin: 1st ampoule	2	121-33-5	204-465-2	None	None
Acetaldehyde: 1st ampoule	0.2	75-07-0	200-836-8	F+, Xi, Xn	R12, R36/37, R40
Hydrochloric Acid, 2nd Ampoule	100%	7647-01-0	231-595-7	T, C, Xi	R23, R35, R37
Chloroform, 3rd Ampoule	100%	67-66-3	200-663-8	Xn, Xi	R22, R38, R40,

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.

# MATERIAL SAFETY DATA SHEET

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**PRODUCT NAME:** Duquenois-Levine Reagent  
**PRODUCT NUMBER(S):** 908 (1006324) **DATE:** August 1, 2011

## SECTION 5 - FIRE FIGHTING MEASURES

**GENERAL HAZARDS:**

Hydrochloric Acid, 2nd Ampoule is highly corrosive to most metals with evolution of flammable hydrogen gas. Chloroform emits toxic and irritating gases when involved in a fire.

**EXTINGUISHING MEDIA:**

Use extinguishing media appropriate for surrounding fire and foam, CO<sub>2</sub> 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, phosgene, other organo-halogens, 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. For chloroform, eliminate sources of ignition, absorb with vermiculite.

## SECTION 7 - HANDLING AND STORAGE

**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 chloroform vapor and prevent vapor accumulation in enclosed areas.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
Ethanol 1st ampoule	1000	1900			1000		1000	1900
Vanillin: 1st ampoule	NE			NE		2		NE
Acetaldehyde 1st ampoule	25		2000 IDLH		25 Ceiling		200	360
Hydrochloric Acid, 2nd Ampoule.	2			50 IDLH		2	5	7
Chloroform, 3rd Ampoule.	10			500 IDLH	10		50	240

### 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 for minor Chloroform spills.

**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, and to clean up toxic chloroform.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE AND ODOR**

1st Ampoule – Clear liquid; 2nd ampoule – Clear fuming liquid acid odor (HCl); 3rd ampoule – colorless liquid, ethereal odor (Chloroform).

VOC NE Volatility NE

**VAPOR PRESSURE**

100mm Hg at 10.4°C Chloroform

**SPECIFIC GRAVITY (WATER = 1)**

1.49 for Chloroform

**BOILING POINT / BOILING RANGE**

61°C for Chloroform

**SOLUBILITY IN WATER**

62% for Hydrochloric acid, Slight for Chloroform.

**FLASH POINT**

56°F for Ethanol (Ampoule 1)

**VISCOSITY**

NA

**FLAMMABLE LIMITS**

LEL: NR UEL: NR

**VAPOR DENSITY (AIR = 1)**

4.12 for Chloroform

**AUTO-IGNITION TEMPERATURE**

NR

**EVAPORATION RATE (BUTYL ACETATE = 1)**

NE

# MATERIAL SAFETY DATA SHEET

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<b>PRODUCT NAME:</b>	Duquenois-Levine Reagent	<b>DATE:</b>	August 1, 2011
<b>PRODUCT NUMBER(S):</b>	908 (1006324)		

## SECTION 10 - STABILITY AND REACTIVITY

STABILITY	STABLE	X	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. Chloroform when heated in air under fire conditions may decompose to deadly phosgene gas. 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, phosgene, other organo-halogens, 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	3450 mg/kg (ORAL, MOUSE).	NE
	200-578-6		
Vanillin: 1st ampoule	121-33-5	Oral, rat: LD50 = 1580 mg/kg	NE
	204-465-2		
Acetaldehyde: 1st ampoule	75-07-0	Oral, rat: LD50 = 661 mg/kg	Inhalation, rat: LC50 = 13300 ppm/4H.
	200-836-8		
Hydrochloric Acid, 2nd Ampoule	7647-01-0	Oral, rabbit: LD50 = 900 mg/kg.	Inhalation, rat: LC50 = 3124 ppm/1H.
	231-595-7		
Chloroform, 3rd Ampoule	67-66-3	Oral, rat: LD50 = 695 mg/kg; Oral, mouse: LD50 = 36 mg/kg	Inhalation, rat: LC50 = 6000 mg/m3/6H.
	200-663-8		

## SECTION 12 - ECOLOGICAL INFORMATION

**For Chloroform:** Ecotoxicity: Fish: Channel catfish: LC50 = 75 ppm; 96 Hr; Unspecified Fish: Rainbow trout: LC50 = 43.8 mg/L; 96 Hr; Static bioassay Fish: Fathead Minnow: LC50 = 129.0 mg/L; 96 Hr; Static bioassay (pH = 7.6-8.3) Fish: Bluegill/Sunfish: LC50 = 100.0 mg/L; 96 Hr; Static bioassay Water flea Daphnia: EC50 = 28.9 mg/L; 48 Hr; Static bioassay The majority of the environmental releases from industrial uses are to the atmosphere; releases to water and land will be primarily lost by evaporation and will end up in the atmosphere. Release to the atmosphere may be transported long distances and will photodegrade with a half-life of a few months. Spills and other releases on land will also leach into the groundwater where it will reside for long periods of time.

**Environmental:** Chloroform will not be expected to bioconcentrate into the food chain but contamination of food is likely due to its use as an extractant and its presence in drinking water.

**For Hydrochloric Acid:** Ecotoxicity: Fish: Bluegill/Sunfish: 3.6 mg/L; 48Hr; Lethal (unspecified) Fish: Bluegill/Sunfish: LC50; 96 Hr; pH 3.0-3.5 No data available.

**Environmental:** Will exhibit extensive evaporation from soil surfaces. Upon transport through the soil, hydrochloric acid will dissolve some of the soil materials (especially those with carbonate bases) and the acid will neutralize to some degree.

**For Acetaldehyde:** Ecotoxicity: Fish: Fathead Minnow: EC50 = 30.8-37.2 mg/L; 96 Hr; Flow-through at 21.6-23.9°C (pH 7.1-7.63) Fish: Bluegill/Sunfish: LC50 = 53 mg/L; 96 Hr; Unspecified Water flea Daphnia: EC50 = 9000-14000 mg/L; 48 Hr; Unspecified Bacteria: Phytobacterium phosphoreum: EC50 = 280.6-403.5 mg/L; 5,15,25 min; Unspecified No data available.

**Environmental:** In the atmosphere it will degrade in a matter of hours by reaction with hydroxyl radicals and photolysis. If released into water it will rapidly biodegrade and volatilize (half-life 3 hrs for a typical river). If spilled on land it will also rapidly evaporate and leach into the ground where it will biodegrade. Physical: Log P(oct) = 0.5

## 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.

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<b>PRODUCT NAME:</b>	Duquenois-Levine Reagent	<b>DATE:</b>	August 1, 2011
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## SECTION 14 - TRANSPORT INFORMATION

<b>PROPER SHIPPING NAME:</b> Not Regulated* (USA Ground), Chemical Kit UN 3316 (Intl./Air/Sea)	
<b>DOT HAZARD CLASS / Pack Group:</b> Not Regulated	<b>IMDG HAZARD CLASS:</b> 9
<b>REFERENCE:</b>	<b>RID/ADR Dangerous Goods Code:</b> 9
<b>UN / NA IDENTIFICATION NUMBER:</b> 2922	<b>TDG Dangerous Goods Code:</b> 9
<b>LABEL:</b> Miscellaneous Materials (9)	<b>Hazard Identification Number (HIN):</b> 90
<b>HAZARD SYMBOLS:</b>	<b>IATA HAZARD CLASS / Pack Group:</b> 9 / II

\* - Excepted Quantity under 49CFR173.4(b) for ground and rail shipments in the USA only.

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

## SECTION 15 - REGULATORY INFORMATION

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

**313 REPORTABLE INGREDIENTS:** This material contains Chloroform (CAS# 67-66-3, 99+%) and Acetaldehyde (CAS#75-07-0, 0.2%) Hydrogen Chloride (CAS# 7647-01-0 32-38%) which are subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

**CERCLA (USA - Comprehensive Response Compensation and Liability Act):** CAS# 67-66-3: 10 lb final RQ; 4.54 kg final RQ. CAS# 75-07-0: 1000 lb final RQ; 454 kg final RQ. CAS# 7647-01-0: 5000 lb final RQ; 2270 kg final RQ.

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

**WARNING!** This product contains chemicals known to the State of California to cause cancer. Acetaldehyde, Chloroform.

**CCPR (Canadian Controlled Products Regulations):** Not Listed.

**CIDL (Canadian Ingredient Disclosure List):** Not listed.

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

**CDSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List):** Ingredients listed on DSL.

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

**WGK Water Quality Index:** 2 (overall 3 ampoules).

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
<b>R11: Highly Flammable.</b> <b>R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.</b> <b>R23: Toxic by inhalation.</b> <b>R32: Contact with acids liberates very toxic gas.</b> <b>R35: Causes severe burns.</b> <b>R37: Irritating to respiratory system.</b> <b>R38: Irritating to skin.</b> <b>R40: Limited evidence of carcinogenic effect.</b> <b>R48/20/22: Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.</b>	<div style="text-align: center;">   <b>Xn: Harmful</b> </div> <div style="text-align: center;">   <b>T: Toxic</b> </div> <div style="text-align: center;">   <b>C: Corrosive</b> </div> <div style="text-align: center;">   <b>F: Highly Flammable</b> </div>	<b>For Hydrochloric Acid Ampoule #2:</b> <b>S1/2: Keep locked up and out of the reach of children.</b> <b>S9: Keep container in a well ventilated place.</b> <b>S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</b> <b>S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.</b> <b>S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</b> <b>For Chloroform Ampoule #3:</b> <b>S1/2: Keep locked up and out of the reach of children.</b> <b>S36/37: Wear suitable protective clothing and gloves.</b>

# MATERIAL SAFETY DATA SHEET

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PRODUCT NAME: Duquenois-Levine Reagent  
 PRODUCT NUMBER(S): 908 (1006324) DATE: August 1, 2011

## 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

FLAMMABILITY:

0

1 = SLIGHT

PHYSICAL HAZARD:

0

2 = MODERATE

PERSONAL PROTECTIVE EQUIPMENT:

H

3 = HIGH

4 = EXTREME

### REVISION SUMMARY:

Revised 8/1/2011 to EU protocols, supersedes 9/10/2008 issue. JTV.

### 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.