



# Duquenois-Levine Reagent for Marijuana (Ampoule 1)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date:02/21/2013

Supersedes:01/31/2011

Version:

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name. : Duquenois-Levine Reagent for Marijuana (Ampoule 1)  
Product code : NARK2005A

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation : Crime Scene Investigation

#### 1.3. Details of the supplier of the safety data sheet

SIRCHIE Finger Print Laboratories  
100 Hunter Place  
27596 Youngsville, NC - USA  
T 919-554-2244; 800-356-7311 - F 919-554-2266; 800-899-8181  
<http://www.sirchie.com>

#### 1.4. Emergency telephone number

Emergency number : 1.800.424.9300

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Flam. Liq. 1 H224  
Carc. 1A H350

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H224 - Extremely flammable liquid and vapor  
H350 - May cause cancer

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.  
P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof electrical, lighting, ventilating equipment.  
P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
P280 - Wear eye protection, protective gloves.  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P370+P378 - In case of fire: Use CO2, dry chemical, foam, water spray for extinction.  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container to local/regional/national/international regulations.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

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Name	Product identifier	%	Classification (GHS-US)
ethanol	(CAS No.)64-17-5	95	Flam. Liq. 2, H225 Carc. 1A, H350
acetaldehyde	(CAS No.)75-07-0	> 2.5	Flam. Liq. 1, H224 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H335
4-hydroxy-3-methoxybenzaldehyde	(CAS No.)121-33-5	2	Eye Irrit. 2A, H319

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Reactivity : No reactivity hazard other than the effects described in sub-sections below.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
- Incompatible products : Strong bases. strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.

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### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### acetaldehyde (75-07-0)

USA ACGIH	ACGIH Ceiling (ppm)	25 ppm
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### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure. Gas mask. Gloves. Safety glasses.



Hand protection : Wear protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Respiratory protection : Wear approved mask.  
Other information : When using, do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Appearance : Clear, colorless liquid.  
Color : Colorless.  
Odor : Aromatic odour.  
Odor threshold : No data available  
pH : No data available  
Relative evaporation rate (butyl acetate=1) : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Self ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapor pressure : No data available  
Relative vapor density at 20 °C : No data available  
Relative density : No data available  
Solubility : Soluble in water.  
Log Pow : No data available  
Log Kow : No data available  
Viscosity, kinematic : No data available  
Viscosity, dynamic : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available  
Explosive limits : No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

Not established.

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### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Sparks.

### 10.5. Incompatible materials

strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

acetaldehyde (75-07-0)	
LD50 oral rat	661 - 1930 mg/kg (Rat)
LD50 dermal rabbit	3540 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	24 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	13300 ppm/4h (Rat)

4-hydroxy-3-methoxybenzaldehyde (121-33-5)	
LD50 oral rat	2800 mg/kg (Rat)
LD50 dermal rabbit	> 5010 mg/kg (Rabbit)

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classifiedBased on available data, the classification criteria are not met  
Carcinogenicity : May cause cancer.

acetaldehyde (75-07-0)	
IARC group	2B

Reproductive toxicity : Not classifiedBased on available data, the classification criteria are not met  
Specific target organ toxicity (single exposure) : Not classified  
Specific target organ toxicity (repeated exposure) : Not classifiedBased on available data, the classification criteria are not met  
Aspiration hazard : Not classifiedBased on available data, the classification criteria are not met  
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

acetaldehyde (75-07-0)	
LC50 fish 1	53 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	48.3 mg/l (48 h; Daphnia magna; Static system)
LC50 fish 2	30.8 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 2	3.7 - 6.8 g/l (48 h; Ceriodaphnia dubia)
TLM fish 1	70 ppm (24 h; Lagodon rhomboides)
TLM fish 2	53 ppm (96 h; Lepomis macrochirus)
Threshold limit other aquatic organisms 1	400 mg/l (24 h; Bacteria; FERMENTATION TUBE)
Threshold limit other aquatic organisms 2	57 mg/l (20 h; Protozoa; TOXICITY TEST)
Threshold limit algae 1	237 mg/l (120 h; Diatomeae)

4-hydroxy-3-methoxybenzaldehyde (121-33-5)	
LC50 fish 1	100 - 131 mg/l (24 h; Pimephales promelas; Static system)
EC50 Daphnia 1	180 mg/l (24 h; Daphnia magna)
LC50 fish 2	88 - 121 mg/l (96 h; Pimephales promelas; Static system)
Threshold limit algae 1	2 mg/l (72 h; Chlorella sp.)
Threshold limit algae 2	2 mg/l (72 h; Scenedesmus subspicatus)

### 12.2. Persistence and degradability

Duquenois-Levine Reagent for Marijuana (Ampoule 1)	
Persistence and degradability	Not established.

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<b>acetaldehyde (75-07-0)</b>	
Persistence and degradability	Readily biodegradable in water. Photodegradation in the air.
Biochemical oxygen demand (BOD)	1.27 g O <sub>2</sub> /g substance
ThOD	1.82 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.70 % ThOD

<b>4-hydroxy-3-methoxybenzaldehyde (121-33-5)</b>	
Persistence and degradability	Inherently biodegradable.

### 12.3. Bioaccumulative potential

<b>Duquenois-Levine Reagent for Marijuana (Ampoule 1)</b>	
Bioaccumulative potential	Not established.

<b>acetaldehyde (75-07-0)</b>	
Log Pow	0.5 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>4-hydroxy-3-methoxybenzaldehyde (121-33-5)</b>	
Log Pow	1.21 - 1.37
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

<b>acetaldehyde (75-07-0)</b>	
Surface tension	0.021 N/m (20 °C)

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

### 14.1. UN number

UN-No.(DOT) : 3316

### 14.2. UN proper shipping name

DOT Proper Shipping Name : Chemical kit  
Department of Transportation (DOT) Hazard Classes : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140  
Hazard labels (DOT) : 9 - Miscellaneous dangerous compounds



Packing group (DOT) : II - Medium Danger

### 14.3. Additional information

Other information : No supplementary information available.

### Overland transport

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

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### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

#### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

No additional information available

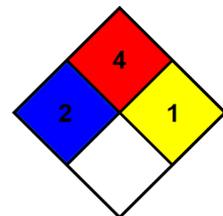
## SECTION 16: Other information

- Indication of changes : Revision - See : \*.
- Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging. Keep in tightly closed container. Keep cool and dry. Avoid all ignition sources - heat, open flame, sparks. Avoid incompatible materials. Avoid dust creation and accumulation. Avoid inhalation and ingestion. Avoid contact with eyes. Wash thoroughly after handling.
- Other information : None.

Full text of H-phrases: see section 16:

Carc. 1A	Carcinogenicity Category 1A
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 1	Flammable liquids Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H224	Extremely flammable liquid and vapor
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H350	May cause cancer
H351	Suspected of causing cancer

- NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
- NFPA fire hazard : 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.
- NFPA reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



### HMIS III Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 4 Severe Hazard
- Physical : 1 Slight Hazard
- Personal Protection : G

SDS US (GHS HazCom 2012)

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.*