

Safety Data Sheet

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

Date of issue: 03/20/2014 Revision date: 01/06/2015

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

**Product identifier** 

Product form : Mixtures

Product name : Indanedione Liquid Latent Print Developer Part (B)

Product code LV508L-B

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Latent fingerprint developer

Details of the supplier of the safety data sheet

SIRCHIE Finger Print Laboratories 100 Hunter Place

Youngsville, NC 27596 - 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**

### Classification of the substance or mixture

### Classification (GHS-US)

Flam. Liq. 2 H225 Skin Corr. 1A H314 STOT SE 3 H336

#### 2.2. **Label elements**

## **GHS-US** labeling

Hazard pictograms (GHS-US)



GHS02





GHS07

GHS05

Signal word (GHS-US) : Danger

H225 - Highly flammable liquid and vapor Hazard statements (GHS-US)

H314 - Causes severe skin burns and eye damage

H336 - May cause drowsiness or dizziness

: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking Precautionary statements (GHS-US)

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

P260 - Do not breathe fume, spray, vapors

P264 - Wash all exposed skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear eye protection, protective gloves

P301+P330+P331 - If swallowed: Rinse mouth. Do NOT induce vomiting

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

P304+P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician P312 - Call a POISON CENTER/doctor/physician if you feel unwell

P363 - Wash contaminated clothing before reuse

P370+P378 - In case of fire: Use CO2, dry chemical, foam, water spray for extinction

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P403+P235 - Store in a cool and well-ventilated place

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P405 - Store locked up

P501 - Dispose of contents/container to local/regional/national/international regulations

### 2.3. Other hazards

Other hazards not contributing to the classification

: None under normal conditions.

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

No data available

### **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

Not applicable

Full text of H-phrases: see section 16

### 3.2. Mixtures

Name	Product identifier	%	Classification (GHS-US)
Ethyl Acetate		70	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
acetic acid	(CAS No) 64-19-7	30	Flam. Liq. 3, H226 Skin Corr. 1A, H314

## **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 data available.

### 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.

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### 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.

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### 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.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

acetic acid (64-19-7)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm

### 8.2. Exposure controls

Relative density

Viscosity, kinematic

Solubility

Log Pow

Log Kow

Personal protective equipment : Avoid all unnecessary exposure.

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 : Pungent. Vinegar odour.

Odor threshold No data available рΗ No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available Freezing point No data available : No data available **Boiling point** : No data available Flash point : No data available Self ignition temperature 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

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: No data available

: Soluble in water.

No data availableNo data available

: No data available

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Viscosity, dynamic : No data available Explosive properties : No data available Oxidizing properties : No data available **Explosive limits** : No data available

### Other information

No additional information available

### **SECTION 10: Stability and reactivity**

### Reactivity

No data available.

#### 10.2. **Chemical stability**

Stable under normal conditions.

### Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

### **Conditions to avoid**

Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

strong acids. Strong bases.

### **Hazardous decomposition products**

fume. Carbon monoxide. Carbon dioxide.

### **SECTION 11: Toxicological information**

#### Information on toxicological effects 11.1.

: Not classified Acute toxicity

Skin corrosion/irritation : Causes severe skin burns and eye damage

Serious eye damage/irritation : Not classified Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity Not classified Reproductive toxicity : Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated : Not classified

exposure) Based on available data, the classification criteria are not met

Not classified Aspiration hazard

Based 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

acetic acid (64-19-7)		
LC50 fish 1	75 mg/l (96 h; Lepomis macrochirus; Fresh water)	
EC50 Daphnia 1	47 mg/l (24 h; Daphnia magna; NOT NEUTRALIZED)	
EC50 other aquatic organisms 1	> 5000 mg/l (5 h; Activated sludge)	
LC50 fish 2	94 mg/l (96 h; Oryzias latipes)	
EC50 Daphnia 2	95 mg/l (24 h; Daphnia magna; Static system)	
TLM fish 1	100 ppm (96 h; Carassius auratus; Fresh water)	
Threshold limit algae 1	90 mg/l (192 h; Microcystis aeruginosa; NEUTRALIZED)	

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acetic acid (64-19-7)	
Threshold limit algae 2	4000 mg/l (192 h; Scenedesmus quadricauda; NEUTRALIZED)

### 12.2. Persistence and degradability

Indanedione Liquid Latent Print Developer Part (B)		
Persistence and degradability	Not established.	
acetic acid (64-19-7)		
Persistence and degradability	Readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil.	
Biochemical oxygen demand (BOD)	0.6 - 0.74 g O <sup>2</sup> /g substance	
Chemical oyxgen demand (COD)	1.03 g O²/g substance	
ThOD	1.07 g O²/g substance	
BOD (% of ThOD)	56 - 69 % ThOD	
Ethyl Acetate		
Persistence and degradability	Not established.	

### 12.3. Bioaccumulative potential

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Indanedione Liquid Latent Print Developer Part (B)		
Bioaccumulative potential Not established.		
acetic acid (64-19-7)		
Log Pow	-0.31 (Experimental value)	
Bioaccumulative potential	Bioaccumulation: not applicable.	
Ethyl Acetate		
Bioaccumulative potential	Not established.	

### 12.4. Mobility in soil

acetic acid (64-19-7)	
Surface tension	0.028 N/m (20 °C)

: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

### 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 DOT

UN-No.(DOT) : 1173

DOT Proper Shipping Name : Flammable - Ethyl Acetate

Department of Transportation (DOT) Hazard

Classes

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : I - Great Danger

**Additional information** 

Other information : No supplementary information available.

**ADR** 

Transport document description

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### Transport by sea

No additional information available

### Air transport

No additional information available

### **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

### Indanedione Liquid Latent Print Developer Part (B)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)

### 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

Training advice

### 15.2.2. National regulations

No additional information available

# 15.3. US State regulations

Ethyl Acetate				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes				

### **SECTION 16: Other information**

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.

: 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. Normal use of this

product shall imply use in accordance with the instructions on the packaging.

Other information : None.

### Full text of H-phrases: see section 16:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Skin Corr. 1A	skin corrosion/irritation Category 1A
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor

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H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual

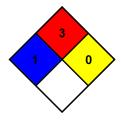
injury even if no treatment is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all

ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



### **HMIS III Rating**

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

: G

Flammability : 3 Serious Hazard
Physical : 0 Minimal Hazard

SDS US (GHS HazCom 2012)

Personal Protection

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.

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