



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No.: CC0200  
Effective Date: January 1, 2007

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

<b>Product</b>	Carnoy's Solution
<b>Chemical Synonyms</b>	Lebrun Fixative
<b>Formula</b>	Mixture *
<b>Unit Size</b>	up to 3.785 Lt.
<b>C.A.S. No.</b>	Mixture.

 <b>NFPA</b> HAZARD RATING MINIMAL SLIGHT MODERATE SERIOUS SEVERE 0 1 2 3 4	<b>CHEMTREC</b> <b>800-424-9300</b> Day 585-226-6177	<table border="1"> <tr> <td>Health</td> <td>3</td> </tr> <tr> <td>Fire</td> <td>3</td> </tr> <tr> <td>Reactivity</td> <td>2</td> </tr> </table>	Health	3	Fire	3	Reactivity	2
	Health	3						
Fire	3							
Reactivity	2							
		<b>HMIS *</b>						

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
*Ethyl alcohol, denatured: (CAS No. 64-17-5)	59%	1000 ppm; 1880 mg/m <sup>3</sup>
Chloroform: (CAS No. 67-66-3)	30%	10, A2 ppm; 49, A2 mg/m <sup>3</sup>
Acetic acid, glacial: (CAS No. 64-19-7)	11%	10 ppm, 25 mg/m <sup>3</sup>

**DANGER! FLAMMABLE! POISON! HARMFUL IF INHALED OR SWALLOWED. CAUSES IRRITATION ON CONTACT. CONTAINS CHLOROFORM, A SUSPECTED CARCINOGEN. CAN CAUSE ADVERSE REPRODUCTIVE EFFECTS.**

## SECTION III PHYSICAL DATA

Melting Point (°F)	Approx. -65°C (-85°F)	Specific Gravity (H <sub>2</sub> O = 1)	1.0 @ 20°C
Boiling Point (°F)	Unknown: range 61°-118°C (141°-244°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	(Chloroform) 100 mm @ 10.4°C	Evaporation Rate (Ether = 1)	> 1
Vapor Density (Air=1)	(Chloroform) 4.12		
Solubility in Water	Approximately 70 mL Carnoy's Solution per 100 mL water.		
Appearance & Odor	Clear, colorless liquid; mild, sweet, vinegar odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	23.86°C (75°F)	<b>Flammable Limits in Air</b>	
		% by Volume	Ethyl Alc.
		Lower	Upper
		3.3%	19%
<b>Extinguisher Media</b>	Water spray; carbon dioxide; dry chemical.		

### SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved, self-contained breathing apparatus and full protective clothing.

### \* Denaturants:

Methanol: (CAS No. 67-56-1), Methyl Isobutyl Ketone: (CAS No. 108-10-1), Isopropyl alcohol: (CAS No. 67-63-0)

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials.  
**NOTE:** Burns with a clear, almost invisible flame, especially hard to see in strong sunlight.

(2004 EMERGENCY RESPONSE GUIDEBOOK, RSPA P 5800.9, GUIDE PAGE NO. 131)

**D.O.T. Flammable liquids, toxic, n.o.s., (Ethyl alcohol, Chloroform), 3, (6.1), UN1992, PG III, Ltd Qty ≤ 5 Lt.**

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

## SECTION V HEALTH HAZARD DATA

CC0200

### Threshold Limited Value

None established for this mixture.

### Effects of Overexposure

Prolonged inhalation of high concentration or repeated exposures to low concentrations causes CNS depression and may result in liver or kidney and possible cardiac sensitization. Contact with eyes causes irritation and may be painful. Prolonged or repeated contact with the skin causes defatting and cracking of the skin. To the best of our knowledge, this chemicals mixture, physical and toxicological properties have not been thoroughly investigated. Target organs: Eyes, central nervous system, liver, kidneys.

### Emergency and First Aid Procedures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. **EYES:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

## SECTION VI REACTIVITY DATA

<b>Stability</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>	Open flame, excessive temperature and heat.
	<b>Stable</b>	X		

### Incompatibility (Materials to Avoid)

Excessive water, strong alkalies, oxidizing materials.

### Hazardous Decomposition Products

Phosgene, hydrochloric acid, carbon oxides.

### Hazardous Polymerization

### Conditions to Avoid

<b>May Occur</b>	<b>Will Not Occur</b>
	X

Not applicable.

## SECTION VII SPILL OR LEAK PROCEDURES

### Steps to be taken in case material is released or spilled

Wear suitable protective clothing and have good ventilation, absorb spill with an inert dry material, and place in suitable container for disposal. Wash spill area with soap and water.

### Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in an approved incinerator equipped with an afterburner and scrubber.

## SECTION VIII SPECIAL PROTECTION INFORMATION

**Respiration Protection (Specify Type)** Work in ventilation hood or wear a NIOSH/MSHA-approved respirator.

<b>Ventilation</b>	<b>Local Exhaust</b>	<b>Recommended.</b>	<b>Special</b>	<b>No.</b>
	<b>Mechanical (General)</b>	<b>Recommended.</b>	<b>Other</b>	<b>No.</b>

**Protective Gloves** Rubber. **Eye Protection** Chemical safety goggles.

**Other Protective Equipment** Faceshield, lab coat, ventilation hood, proper gloves, fire extinguisher, eye wash station.

## SECTION IX SPECIAL PRECAUTIONS

### Precautions to be Taken in Handling & Storing

Store in a cool, dry, well-ventilated place, preferably not above 30°C (86°F). Wash thoroughly after handling. Avoid contact with skin, eyes and mucous membranes.

Keep container tightly closed when not in use.

### Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Avoid breathing vapors. Use with adequate ventilation. Laboratory studies have shown chloroform, a component of this product produces cancer in animals. Handle as a suspected carcinogen. Chronic exposure may cause embryo-fetal injury. Remove and wash contaminated clothing.

**WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.**

Revision No.	13	Date	01/01/07	Approved	James A. Bertsch	Chemical Safety Coordinator	JAB
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