



OFFICE OF LABORATORY ANIMAL CARE

Operating Guidelines

OG Number:	616	Formaldehyde & Formalin Use and Safety	Revision #:	0
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Procedures

Engineering Controls:

1. Proper engineering controls and PPE must be used at all times while working with formaldehyde and formalin.
 - a. Engineering Controls: A fume hood, ducted biosafety cabinet (hard ducted into the ceiling), or downdraft table should be used to remove vapors.

Personal Protective Equipment:

1. Personal Protective Equipment: The level of skin and eye protection should be selected based on the potential for splashing and other forms of exposure.
 - a. If work is performed **within** a fume hood or ducted Biosafety cabinet, eye and respiratory protection may not be necessary. At a minimum, a single pair of chemical resistant gloves (nitrile or natural rubber), non-porous lab coat, and closed-toed imperious footwear will be worn. Any gloves that are torn/punctured or otherwise defective should be changed.
 - b. If work is approved by EH&S to be performed **outside** of a fume hood or ducted Biosafety cabinet, then eye protection and a proper fit tested respirator must be worn in addition to the minimally listed PPE above.

First Aid Procedures:

1. First Aid must be performed immediately if there is a cut or injury. This should be reported to the supervisor and the individual should seek medical attention at Tang Center Urgent Care or Alta Bates, Emergency after first aid is performed.
 - a. Skin Exposure:
 - This is not an emergency unless respiratory signs are present.
 - Skin exposed to Formaldehyde/Formalin should be rinsed with water for 15 minutes.
 - Contaminated clothing may hold the chemicals in contact with the skin without being immediately noticed.
 - Remove clothing immediately and wash thoroughly before use.
 - b. Eye Exposure:
 - In the event of an eye exposure, the eye should be immediately flushed with water for at least 15 minutes.
 - This should be reported to the supervisor and call 911 immediately.
 - c. Ingestion:
 - DO NOT induce vomiting; give milk, activated charcoal or water, if conscious.
 - Call 911 immediately.
 - d. Inhalation (eg, uncontained spill outside of fume hood or other scavenging device):
 - Evacuate the affected individual immediately to clean air.
 - If an individual displays respiratory difficulty or other symptoms (eg, burning sensation within airways, respiratory difficulty) call 911 immediately.
 - When safe to do so, contact EHS as described under the "Chemical Spills" section below."

Storage Requirements:

1. Use and store formaldehyde/formalin only within designated areas, such as necropsy and procedure rooms.
 - a. All chemicals containing Formaldehyde/Formalin must be stored in a labeled secondary container.
 - b. The label must state the following: "DANGER, CANCER HAZARD"

Chemical Spills:

1. Hazardous chemical spill training should be completed prior to work with formaldehyde/formalin. Training is located at the UC Learning Center "EHS 106 Hazardous Materials Spill Response Training".
 - a. For small spills, wipe up with an absorbent material, decontaminate the area with 70-75% ethanol, and dispose of material with other hazardous waste.
 - Charcoal filtered half masks can be made available, if needed.
 - b. For large spills, during work hours contact EH&S at (510) 642-3073 and after hours contact UCPD at (510) 642-3333 or 911.

Decontamination:

1. Work areas must be decontaminated with 70-75% ethanol. Hands and arms should be washed with soap and water after finishing.

Waste Disposal:

1. Dispose of formaldehyde/formalin in accordance with EH&S hazardous waste disposal procedures (<https://ehs.berkeley.edu/hazardous-materials>). Never dispose of these chemicals down the floor or sink drains.

REVISION HISTORY			
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