

## FORMALDEHYDE

**Synonyms:** Methanal, Methyl aldehyde, Methylene oxide

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
<b>FIRE</b>	Extremely flammable.	NO open flames, NO sparks, and NO smoking.	Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out; in other cases extinguish with powder, carbon dioxide.
<b>EXPLOSION</b>	Gas/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting.	In case of fire: keep cylinder cool by spraying with water.
<b>EXPOSURE</b>		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
<b>•INHALATION</b>	Burning sensation. Cough. Headache. Nausea. Shortness of breath.	Ventilation or local exhaust	Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.
<b>•SKIN</b>		Cold-insulating gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
<b>•EYES</b>	Causes watering of the eyes. Redness. Pain. Blurred vision.	Chemical goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>•INGESTION</b>		Do not eat, drink, or smoke during work.	

**Chemical Dangers:** The substance polymerizes due to warming. Reacts with oxidants.

**Physical Dangers:** The gas mixes well with air, explosive mixtures are formed easily.

**Storage:** Incompatibilities and reactivities include strong oxidizers, alkalis & acids; phenols; urea [Note: Pure formaldehyde has a tendency to polymerize. Reacts with HCl to form bis-Chloromethyl ether.] Work areas where spillage may occur (areas where fixed specimens or stock formalin are stored) shall be routinely inspected for leaks or spills. Labeling of formaldehyde containers and products shall be in accordance with the OSHA Formaldehyde Standard 29CFR1910.1048 and Safety and Health Policy HM-08-18.

**Handling, Containment Devices and PPE:** Use in exhaust hood with nitrile chemical resistant gloves (if heavy exposure is anticipated contact Safety and Health for other glove options) and

chemical goggles. If a splash hazard to the face is present, a face shield is also required. For all tasks for which contact with the skin or eyes with fluids containing 1% formaldehyde or greater is likely, suitable protective clothing shall be worn by employees.

**Waste Disposal:** Collect and store in a glass container labeled with the following "Hazardous Waste - Formaldehyde." Call Safety and Health at x5069 on the Health Science Campus and x3600 on the Main Campus for pick up.

**Emergency Spill Procedures and Decontamination:** call x 77 on the Health science Campus and x2600 for Campus Police on the Main Campus. For any spill or release of formalin (any solution greater than 0.1%) estimated to be less than 30ml, the individual causing the spill should don appropriate protective equipment, wipe up the spill immediately, place the absorbent in a sealed bag, and place into a local exhaust hood. Safety and Health should be contacted to come and retrieve the waste.