


Job Hazard Analysis: Chemical Use

<p>Formaldehyde (Laboratory Grade)</p> 	<p>Personal Protective Equipment (PPE) Required:</p> <p>Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fumes/gas/mist/vapors/spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid breathing dust/fumes/gas/mist/vapors/spray. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.</p>
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Hazards: Toxic if swallowed [Danger Acute toxicity, oral]. Toxic in contact with skin [Danger Acute toxicity, dermal]. Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]. May cause an allergic skin reaction [Warning Sensitization, Skin]. Causes serious eye damage [Danger Serious eye damage/eye irritation]. Fatal if inhaled [Danger Acute toxicity, inhalation]. Toxic if inhaled [Danger Acute toxicity, inhalation]. Suspected of causing genetic defects [Warning Germ cell mutagenicity]. May cause cancer [Danger Carcinogenicity]. Suspected of causing cancer [Warning Carcinogenicity].

(Review supplier Safety Data Sheet (SDS) for complete hazard information)

Job Steps	Hazards	Controls
<p>1. Receiving and Storing Formaldehyde</p>	<ul style="list-style-type: none"> Exposure to vapors or spills Skin contact with liquid Improper storage leading to leaks or reactions 	<ul style="list-style-type: none"> Use appropriate PPE: gloves, goggles, and laboratory coat Store in a well-ventilated area, away from incompatible substances Ensure proper labeling and secure storage to prevent leaks
<p>2. Handling and Preparing Solutions</p>	<ul style="list-style-type: none"> Inhalation of fumes Skin and eye contact Spill or splash during mixing 	<ul style="list-style-type: none"> Use appropriate PPE: gloves, goggles, and laboratory coat Perform work in a fume hood or well-ventilated area Follow proper procedures for mixing and handling to avoid spills

Job Steps	Hazards	Controls
3. Application and Use in Processes	<ul style="list-style-type: none"> • Prolonged exposure to vapors • Accidental release or spill • Contact with eyes, skin, or mucous membranes 	<ul style="list-style-type: none"> • Use appropriate PPE: gloves, goggles, and laboratory coat • Limit exposure time and ensure adequate ventilation • Have spill kits and emergency showers/eyewash stations readily available
4. Cleaning and Disposal	<ul style="list-style-type: none"> • Exposure during cleaning of equipment • Improper disposal methods leading to environmental contamination • Inhalation of fumes during disposal 	<ul style="list-style-type: none"> • Use appropriate PPE: gloves, goggles, and laboratory coat • Follow protocols for cleaning and decontaminating equipment • Dispose of waste according to local regulations and ensure it is in properly labeled containers

Description of Activities	Control Measures
Emergency Procedures	<ul style="list-style-type: none"> • Spill Response: <ul style="list-style-type: none"> ○ Evacuate the area and alert others ○ Use spill containment materials to control the spill ○ Clean up using appropriate PPE and disposal methods • First Aid: <ul style="list-style-type: none"> ○ Inhalation: Move to fresh air immediately and seek medical attention if symptoms persist ○ Skin Contact: Rinse skin thoroughly with water for at least 15 minutes; remove contaminated clothing ○ Eye Contact: Rinse eyes with water for at least 15 minutes and seek medical attention ○ Ingestion: Seek immediate medical attention; do not induce vomiting
Training	<p>Employees should:</p> <ul style="list-style-type: none"> • Be trained on formaldehyde hazards and safe handling procedures • Be trained on the use of PPE and emergency response procedures • Regularly review SDS for formaldehyde.
Review and Monitoring	<ul style="list-style-type: none"> • Conduct regular audits to ensure compliance with safety procedures • Monitor air quality in areas where formaldehyde is used • Review and update the job hazard analysis (JHA) periodically or when new hazards are identified

Resource: National Library of Medicine – Pub Chem - [Formaldehyde](#)

This resource is intended for informational purposes only and should not replace laboratory-specific procedures. References to non-CDC resources do not constitute or imply endorsement by CDC or U.S. Department of Health and Human Services. This job aid is a component of the free, on-demand CDC training course “Fundamentals of Working Safely with Formaldehyde and Glutaraldehyde”. Find the course at <https://reach.cdc.gov/training>

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