

FORMALDEHYDE (CH₂O)

OTHER NAMES AND SOURCES

- formalin (formaldehyde in water)
- paraform (polymer of formaldehyde)
- methylene glycol (hydrated formaldehyde)
- methyl aldehyde

USES

On campus: fixation of animal or plant tissue, RNA analyses, and as a fumigant in biological cabinets and animal rooms

General uses: resins, plastics, textiles, disinfectant embalming agents, drug testing, photography, automotive industry

HAZARDS



Highly toxic to humans and wildlife if swallowed, inhaled, or comes in contact with skin.



Carcinogenic:
May cause cancer and genetic defects.



Corrosive and irritant: Can cause severe skin burns and eye damage. Repeated exposures to low levels can cause sensitization, an allergic reaction due to prior contact.



REDUCE RISKS



May require medical monitoring. Complete a Hazard Inventory form. <https://hazard-inventory.ehs.iastate.edu>



Never work alone.



Use only in a fume hood, well-ventilated area, or with a respirator.



Wear goggles, gloves, lab coat, long pants and fully enclosed shoes.



Keep away from heat/sparks/open flame/hot surfaces - this is a combustible liquid.



Choose gloves appropriate to the hazard using...C₃D₂

Chemicals
Concentration
Contact Type

Duration
Dexterity

IN CASE OF EXPOSURE

Signs and Symptoms: watery eyes, burning sensation in eyes, nose, and throat; skin rashes, nausea, coughing, chest tightness, and allergic reaction.



Ensure there is an eyewash and safety shower within 10 seconds of the work area.



If swallowed: Do not induce vomiting; rinse mouth with water and seek immediate medical assistance.



Skin exposure: Remove contaminated clothing, wash with soap and water. Seek immediate medical assistance.



If inhaled: Move the person to fresh air and seek medical attention.

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