

## **Standard Operating Procedures for Formaldehyde (Formalin, Paraformaldehyde)**

### **For an Emergency refer to the Safety Data Sheet**

Formaldehyde is a gas at room temperature and readily evaporates making inhalation the primary route of exposure. Formalin and paraformaldehyde solutions can emit formaldehyde gas above permissible limits.

#### **Hazards:**

Carcinogen- known to cause cancer in humans

Irritant- Eyes, mucous membranes

Toxin- Reproductive system, kidneys, liver, CNS

Sensitizer- Chronic exposure can cause allergy type symptoms

#### **Chemical handling instructions:**

##### Personal Protective Equipment (PPE):

Those handling formaldehyde must wear chemically resistant gloves, lab coat, eye protection, and appropriate lab attire (pants, closed-toe shoes).

If manipulations will occur outside of a chemical fume hood, personnel must wear respirator equipped with a formaldehyde filter until an exposure assessment can be conducted.

##### Preparing formaldehyde solutions:

1. Those preparing formaldehyde solutions must always handle it inside a certified chemical fume hood.
2. Care should be taken to not generate any aerosol during the preparation or injection procedure.

##### Waste disposal:

1. Any leftover/unused formaldehyde should be collected for disposal as chemical waste.
2. Used needles/syringes should be disposed in a sharps container destined for incineration.
3. Contact the Safety Office at x2697 or [SafetyOffice@unthsc.edu](mailto:SafetyOffice@unthsc.edu) for hazardous waste pickup.

#### **Animal Experiments**

There are no additional precautions required for usage in animals.