



Owner C.H.O	DOC. NO. SOP	REV. 2	DATE 12/9/19
DOC. TITLE SOP FOR FORMALDEHYDE			

Environmental Health & Safety

STANDARD OPERATING PROCEDURES (SOP) FOR WORKING WITH FORMALDEHYDE AT AMHERST COLLEGE

General Information

Formaldehyde is a toxic, flammable gas that is usually sold in solution, as 37% formaldehyde or formalin, or as the solid paraformaldehyde. **It is classified as a category 1 carcinogen in humans.** In liquid form, the solution contains methyl alcohol and has a colorless appearance with a very strong, pungent odor. Formaldehyde is commonly used as preservative but has a wide range of uses both industrially and in the laboratory.

Formaldehyde poses considerable risks to humans and the environment and hence, special precautions must be taken in both its handling and disposal

Personal Protective Equipment

When working with Formaldehyde, the following personal protective equipment (PPE) **must** be worn:

Splash goggles

Lab coat

Long pants

Close toed shoes

Nitrile Gloves (double-gloving is recommended; change upon contact)

Safety Devices

Fume hood – always work with a Formaldehyde in a fume hood to prevent exposure by inhalation

Identify the location of all the safety devices in the room before starting your procedure. Also, familiarize yourself with all the possible means of egress

Specific Health Hazards

Note that the exposure limit for this compound is very low. **Throughout an eight-hour workday, personnel shall not be exposed to more than 0.75ppm (0.75mg/L) on average or 3ppm (3mg/L) at any given time (according to OSHA)**



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Formaldehyde may cause respiratory irritation, damage to organs; **repeated exposure may cancer**



Pictogram:

Hazards: Carcinogen, toxic, flammable, corrosive

Routes of Entry

Inhalation, skin absorption, ingestion, skin contact/eye contact

If *any part of your body* comes in contact with Formaldehyde, call the Amherst College Emergency phone number 413-542-2111. Also call this number if you begin to feel ill after working with or in the vicinity of Formaldehyde

Inhalation

If inhaled, move to fresh air, and get help. if you begin to feel ill during / after working with Formaldehyde, Call the Amherst College Police Department (ACDP) at x2111 to report

Eye contact

Use eyewash to flush eyes with water for at least 15 minutes

Skin Contact

Wash skin with plenty of water. Use safety shower, if needed.

Ingestion

Do not induce vomiting.

Storage and Special Handling

Store in a tightly closed container in a cool, dry area that is well ventilated, such as a vented cabinet. Do not store on shelf.

Store away from oxidizers, strong bases, nitriles, acids, isocyanates, acid anhydrides, metals, and acid chlorides

Store away from sources of ignition

If you have Formaldehyde that you no longer need, please contact Jason Williams, x2736, for disposal



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Special Handling

Thoroughly wash hands immediately after using Formaldehyde

Change gloves as often as possible and immediately after contact with chemical

Spill clean up

If a spill of any volume occurs:

Alert everyone in the area

Leave the room

Close the door behind you

Call Jason Williams (Chemical Hygiene Officer) or The Amherst College emergency number (x2111) to report it.

Due to the high toxicity and volatility of this compound, spill clean-up outside of the fume hood shall only be done by trained individuals.

Disposal

Disposable pipets, pipet tips, and any other disposable devices that come in contact with Formaldehyde should be disposed of as hazardous waste. All grossly contaminated PPE shall be disposed of as hazardous waste.

Waste containing Formaldehyde may be disposed of with other non-halogenated compounds, provided that they are compatible.

If you have Formaldehyde that you no longer need, contact the Chemical Hygiene officer

Questions

Contact Jason Williams (x2736) if you have any questions about this SOP or this compound.

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