##### Formaldehyde

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| Standard Operating Procedures for Chemicals or Processes | | | |
| 1 Process  (if applicable) | Formaldehyde-All use of formaldehyde and formaldehyde-containing solutions is regulated under Occupational Health regulation. | | |
| 2 Hazardous Materials and Chemicals | Formaldehyde: Flammable liquid, irritant, sensitizer and potential human carcinogen. Permissible exposure limit (PEL) (8hrs.): 0.75 ppm, short term exposure limit (STEL) (15 min.) 2 ppm, action level (8hrs.): 0.5 ppm. Any product capable of releasing formaldehyde vapor of 0.1 to 0.5 ppm must be labeled that it contains formaldehyde, the availability of physical and health hazard information, and the name and address of the responsible party. For products capable of releasing formaldehyde vapor at levels of 0.5 ppm or above, the label must include the physical and health hazards as well as the warnings "respiratory sensitizer" and "potential cancer hazard". | | |
| 3 Environmental /  Ventilation Controls | Formaldehyde-containing solutions and preserved samples should be dispensed and used only in a properly operating fume hood. Routine use outside of a fume hood is acceptable only when formaldehyde levels are monitored and are below 0.5 ppm.  Employers must determine by breathing zone air monitoring if employees are over exposed to formaldehyde. If the result of 8 hour monitoring is below the action level and the 15 minute monitoring is below the STEL, then no further air monitoring is required. However, if the work procedure changes, then monitoring must be repeated to ensure acceptable exposure levels. Affected employees must be informed of the formaldehyde exposure levels within 15 days of receiving the monitoring results.  An employee reporting significant eye, nose, throat or dermal irritation or sensitization which might be a result of occupational exposure to formaldehyde shall be evaluated by the University's Occupational Health Professional. Based on the medical evaluation results, the Occupational Health Professional may recommend further evaluation, workplace exposure restrictions or reassignment. | | |
| 4 Personal Protective Equipment (PPE) | Chemical splash goggles and nitrile gloves must be worn to prevent eye contact and limit dermal exposure. A lab coat or apron is also required. | | |
| 5 Special Handling Procedures & Storage Requirements | Mixing or dispensing should be done in a hood. Store in a cool dry well ventilated flammable liquid storage area or cabinet. Do not store with strong oxidizing or reducing agents, strong acids or bases, alkalies, alkali metals, amines, ammonia or phenol. Storage cabinet is located\* | | |
| 6 Spill and Accident Procedures | If skin is exposed, wash immediately with soap and water. Flush mucus membranes with large amounts of water. Use drench shower in case of extensive contamination.  Remove all sources of ignition from the spill area.  Spills in fume hood - use absorbent pads or vermiculite to clean up small fume hood spills or to dike spill area. Clean up spill area with additional pads or paper towels. Absorbent pads can be found in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  Spills in room - respiratory protection is required to clean up spills of formaldehyde greater than \_\_\_ ml outside an operating fume hood. If you are not certified to wear a respirator, call UW Safety - RMMC at 307-766-3698 for assistance in contacting a spill cleanup contractor. If it is an emergency (risk of fire or exposure to others) call 911. After cleanup, room air must be monitored by UW Safety prior to occupancy. | | |
| 7 Waste Disposal | If disposing of as hazardous waste, label with Hazardous Waste Label, accumulate according to requirements, and submit a hazardous waste request, available online at <http://www.uwyo.edu/safety> | | |
| 8 Special Precautions for Animal Use  (if applicable) | Disposal of sample tissues or material soaked in formaldehyde should be disposed of by \*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | | |
| Particularly hazardous  substance involved? | | X YES: | Blocks 9 to 11 are Mandatory |
| NO: | Blocks 9 to 11 are Optional. |
| 9 Approval Required | Users must receive specified physical and health hazard information and safe laboratory work practices training from their supervisor. Lab supervisors must ensure that at least two representative breathing zone air samples have been taken for evaluation. Personnel using respirators must be enrolled in University's Respiratory Protection Program. For further information, air sampling guidelines, or a copy of the formaldehyde regulations contact UW Safety at (307-766-3277). | | |
| 10 Decontamination | Wash affected area with soap and water. | | |
| 11 Designated Area | Room # \*\_\_\_\_\_\_\_\_. Special signage may be required depending on air sampling results (see #4 above). Contact UW Safety (6-3277) for further information. | | |
| Name (print) (Assessor): Title: | | | |
| Signature (Assessor): Date: | | | |
| Name (print) (PI, Lab Manager, or Unit Head): Title: | | | |
| Signature (PI, Lab Manager, or Unit Head): Date: | | | |
| Date Sent to UW Safety: | | | |