




Sample Job Hazard Analysis

Job Hazard Analysis: Chemical Use

<p>Dichloromethane (Methylene Chloride)</p> 	<p>Personal Protective Equipment Required: <u>Basic:</u> Safety glasses, lab coat/gown, single use gloves (nitrile), at least 8 mils thick. (Note: nitrile gloves provide only incidental contact protection. Better protection from fluorinated rubber gloves).</p>	<p>JHA Number:</p>
<p>Hazards: Causes skin and serious eye irritation. May cause respiratory irritation and drowsiness or dizziness. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if swallowed or inhaled. (Review supplier SDS for complete hazard information)</p>		

Volume	Description of Activities	Exposure Route	Control Measures
Low to moderate	Pipetting/dispensing using low volume pipettes, Digiflex, etc.	Skin or eye contact, inhalation	<u>Engineering:</u> Work in chemical fume hood <u>PPE:</u> Basic as listed above
Moderate to high volumes	Pouring from original container into graduated cylinder or beaker	Skin or eye contact, inhalation	<u>Engineering:</u> Work in chemical fume hood <u>Administrative:</u> Purchase in smaller volume bottles (1 liter vs. 4 liter) <u>PPE:</u> In addition to basic, wear chemical resistant apron and PVA or Viton (fluoroelastomer) utility weight gloves
Moderate to high volumes	Pouring from graduated cylinder, beaker or original container into instrument	Skin or eye contact, inhalation	<u>Engineering:</u> Work in chemical fume hood if possible to bring feeder bottles to hood.

Volume	Description of Activities	Exposure Route	Control Measures
	feeder bottles at shoulder height or lower		<u>Administrative:</u> Verify receiving container is large enough to contain volume prepared. <u>PPE:</u> In addition to basic, wear chemical resistant apron
All volumes	Pouring from graduated cylinder, beaker or original container into instrument feeder bottles above shoulder height	Skin or eye contact, inhalation, splash to face	<u>Engineering:</u> Work in chemical fume hood if possible to bring feeder bottles to hood. <u>Administrative:</u> Verify receiving container is large enough to contain volume prepared. Use rolling step ladder with hand rails to reach receiving container. <u>PPE:</u> In addition to basic, wear chemical resistant apron, use face shield with safety glasses or chemical splash goggles.
All volumes	Use of TurboVap or similar equipment to remove solvent from sample tubes	Skin or eye contact, inhalation	<u>Engineering:</u> Position snorkel exhaust hose above TurboVap before opening lid at the end of the run. <u>Administrative:</u> Wait a few minutes after opening lid before removing tubes (allows snorkel to pull vapors away) <u>PPE:</u> Basic as listed above
All volumes	Rinsing glassware of other lab ware with this chemical	Skin or eye contact, inhalation	<u>Engineering:</u> Work in chemical fume hood <u>Administrative:</u> If possible, secure glassware/labware in clamp so it doesn't have to be hand-held during rinsing <u>PPE:</u> In addition to basic, wear chemical resistant apron and PVA or Viton (fluoroelastomer) utility weight gloves

Developed by:	Date:	<u>Comments:</u> Notify the supervisor or safety staff if procedures to be used with this chemical are not listed above.
Revised:	Date:	

This job aid is a component of the free, on-demand CDC training course “Fundamentals of Methylene Chloride Safety.” Find the course at <https://reach.cdc.gov/training>