Methylene Chloride

Methylene chloride, also known as dichloromethane, is a colorless, volatile liquid chemical with a sweet, pleasant odor like chloroform. Methylene chloride is used in many industrial processes. This sheet describes the hazards associated with methylene chloride and how to determine if a hazardous exposure is present.

Common causes of methylene chloride exposure
Common pathways of exposure is through skin contact and respiration. This can be from processes that involve paint stripping, pharmaceutical manufacturing, electronics manufacturing, metal cleaning and degreasing, adhesive manufacturing, polyurethane foam production, polycarbonate resin production, and other processes.

How can exposure to methylene chloride affect my health?
Short term exposures can cause symptoms such as irritation to the skin and eyes, confusion, light-headedness, nausea, vomiting, and headaches. Exposure can cause symptoms such as angina to become more severe. Methylene chloride has also been classified as a potential human carcinogen.

What to do when exposed
- If methylene chloride comes in contact with your eyes, flush the area with water for at least 15 minutes. For skin exposure, remove any contaminated clothing and wash the area with soap and water.
- If ingested, do not induce vomiting. Rinse mouth with water. Seek medical attention.

- If the exposure is life threatening, call 911. Otherwise, proceed to the Red Med Occupational Medicine Clinic.
- Report the incident to OEHS (801-581-6590).
- Fill out the “E-1 First Report of Injury Form” from the Human Resources website.

How can I reduce exposure?
- Eliminate the use of materials that contain methylene chloride.
- Enclose any operation or perform experiments in a fume hood.
- Use of personal protective equipment (PPE) such as safety glasses or goggles, compatible gloves, and lab coats is required.
- Respirators are only allowed when engineering methods are not feasible or fail to keep exposures below the PEL. Contact OEHS if you believe respiratory protection is needed.

OSHA standard
The permissible exposure limit (PEL) is 25 ppm, with an action level of 12.5 ppm measured for an eight-hour work day. The short-term exposure limit (STEL) is 125 ppm which is the maximum exposure allowed during a 15 minute period. If you work with methylene chloride, exposure levels need to be measured. Contact OEHS to schedule an assessment.
What to do in case of a small spill

- Stop work
- Get the lab spill kit. If your lab does not have a spill kit contact OEHS.
- Don the provided PPE, including: Gloves, Disposable Sleeves, Apron, and Goggles.
- Lay absorbent pads on the spill to soak up the spill.
- Dispose of saturated pads into the provided bag. If dry absorbents are used, scoop the absorbed liquid with a dustpan into the provided bag.
- Wipe the surface with a damp paper towel and dispose in the provided bag.
- Place the bags in the bucket, remove the apron, sleeves, and gloves and place in the bucket. Seal with the lid and label the material.
- Wash your hands thoroughly with soap and water.
- Put in a request for OEHS to pick up the waste through the Laboratory Management System (LMS).

How do I dispose of methylene chloride?

Do not pour methylene chloride waste into sinks or drains. Methylene chloride waste must be placed in a sealed labeled container. A waste pick up request should be submitted to OEHS through the Laboratory Management System (LMS). Print out and attached the receipt of waste request to the container.