

Safe Science = Good Science

What Action is Needed from University Personnel

1. Review your work area(s) for methylene chloride and commercial products that contain methylene chloride.
2. Consider switching to a safer alternative and submit any unwanted methylene chloride for DEHS chemical waste pick up.
3. If methylene chloride substitution is not feasible, prepare a detailed list of all processes it is used in.
4. Verify that your chemical inventory is accurate, chemical hygiene plan (CHP) is up to date and that your CHP includes a written standard operating procedure for DCM.

Additional Information:

EPA Final Rule:

[Risk Management for Methylene Chloride | US EPA](#)

Alternatives Options for DCM:

[Green Chemistry Initiatives](#)

[Solvents for a Safer, Sustainable Lab](#)

For questions or concerns please call DEHS at 852-6670 or email dehsih@louisville.edu

New EPA Regulations for Methylene Chloride, also known as Dichloromethane (DCM)

Background

The EPA has determined that methylene chloride poses an “unreasonable risk to human health or the environment” following review under Toxic Substance Control Act (TSCA) regulations. The [final rule](#), published in April 2024, prohibits most consumer and commercial uses. An exemption for laboratory use is available, if there is a workplace chemical protection program (WCPP) in place.

Methylene chloride, also known as dichloromethane (DCM), chemical abstract service (CAS) number 75-09-2, is a common solvent used in research and academic laboratory activities for extraction, purification, chromatography, tissue clearing, and other processes.

In addition to lab grade methylene chloride, methylene chloride is a chemical ingredient in a variety of cleaning and maintenance products such as strippers, adhesives and sealants, metal degreasers, automotive care products, lubricants, hobby glue, strippers, brush cleaners, etc. Most of these uses will be prohibited under this new regulation.

Methylene Chloride Health Effects

Health risks associated with methylene chloride include acute and chronic exposure via dermal contact and inhalation. Methylene chloride is considered a carcinogen and an acute neurotoxin and chronic exposure can affect liver and lung function. EPA's full risk evaluation detailing the health effects can be accessed [here](#). OSHA also provides additional [resources](#) regarding occupational health effects of methylene chloride.

First Steps

DEHS will be releasing a survey in early January 2025 to evaluate all methylene chloride uses at UofL. All principal investigators, supervisors, directors, etc. must complete this for the areas they oversee. DEHS will evaluate these responses and schedule in person assessments for all areas using methylene chloride to determine what subsequent steps will be required on a case-by-case basis.