

# Standard Operating Procedure

## Methylene Chloride / Dichloromethane

This is an SOP template and is not comp4019 (s).7145lpl 89418 8.207 8tmne

Building/Room(s) covered by this SOP:	_____
Department:	_____
Principal Investigator Name:	_____
Principal Investigator Signature:	_____

### Section 2 – Hazards

Methylene chloride is an OSHA regulated carcinogen. It is an acutely toxic liquid that is extremely harmful if inhaled or absorbed through the skin. Methylene chloride is toxic to the liver, pancreas, blood, central nervous system, heart, and kidneys.

#### Exposure Limits:

OSHA PEL (8 HR. TWA):	25 ppm
OSHA Short Term Exposure Limit:	125 ppm
ACGIH TLV/TWA:	50 ppm
EPA ECEL:	2 ppm
EPA STEL:	16 ppm



### Section 3 – Engineering Controls and Personal Protective Equipment (PPE)

**Engineering Controls:** Use of Methylene chloride must be conducted in a properly functioning chemical fume hood. The chemical fume hood must be approved and certified within the past 12 months.

**Hygiene Measures:** Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product. Remove any contaminated clothing and wash before reuse.

**Hand Protection:** Chemical-resistant gloves must be worn, polyvinyl acetate, Viton, or fluorinated rubber gloves are recommended. Nitrile and

**Eye Protection:** ANSI approved properly fitting safety glasses or chemical splash goggles are required. A face shield may also be appropriate depending on the specific application.

**Skin and Body Protection:** Laboratory coats must be worn and be appropriately sized for the individual and buttoned to their full length. Personnel must also wear full length pants, or equivalent, and close-toed shoes. Full length pants and close-toed shoes must be worn at all times by all individuals that are occupying the laboratory area. The area of skin between the shoe and ankle must not be exposed.

**Respiratory Protection:** If methylene chloride is being used outside of a chemical fume hood with the sash lowered, respiratory protection may be required. A supplied-air respirator or self-containing breathing apparatus (SCBA) are the only permissible types of respiratory protection. Use of respiratory protection must take place in accordance with the requirements of the institutional Res 0.004 T2 (nt)2.19 (a)2.1 .8 (n.)6 (t)2

**Section 8 – Documentation of Training (signature of all users**