



## Paint and Varnish Strippers, and Surface Cleaners with Methylene Chloride

**Priority Product description:** Various paint or varnish removers, paint strippers, and/ or surface cleaners contain methylene chloride as a solvent. These products are generally used to remove old paint, varnish or other finishes to reveal an object's original surface and also to clean an underlying surface. Methylene chloride enters the body through inhalation of the vapors, absorption through the skin, ingestion or exposure through contaminated water and air near sources of emissions.

### Why was this Priority Product selected?

Use of this product has resulted in several deaths in California, and methylene chloride causes cancer and other chronic health effects.

### Who is at risk?

Workers (such as bathtub finishers), "Do-it-Yourselfers," pregnant women, their fetuses, infants and people at risk of heart attack.

### What are the hazards of methylene chloride?

- Transformed in the body into carbon monoxide, which can cause unconsciousness and death
- Causes cancer in humans
- Short-term exposure causes headaches, dizziness, eye, nose, and throat irritation, chest pain, and difficulty breathing
- Long-term exposure increases the risk of liver, kidney, cardiovascular, and blood cell damage
- Direct skin contact causes intense burning and redness of the skin as well as eye irritation
- Documented fatalities of people in California who used these products

### Are there safer alternatives to methylene chloride in paint and varnish strippers, and surface cleaners?

There are a number of alternatives, depending on the exact use of the product. Paint strippers containing benzyl alcohol instead of methylene chloride may be a safer alternative, and sanding may also be a safer approach in some circumstances. Note that another potential alternative, n-methyl pyrrolidone or NMP, is a known reproductive and developmental toxicant. NMP is also on the Department of Toxic Substances Control's list of candidate chemicals, and therefore not recommended as a "safer alternative" by the Department.

### How do I reduce my exposure?

- Avoid using products that contain methylene chloride. If there is a need to use these products:
  - Ventilation (e.g., local exhaust ventilation) or fresh air exchange are essential.
  - Use an air-supplied respirator.
  - Wear polyvinyl alcohol (PVA) gloves for chemical resistance.

### Where can I get additional information?

Review the California Department of Public Health's Hazard Alert information on proper use and alternatives.

<http://www.cdph.ca.gov/programs/hesis/Documents/MethyleneChlorideAlert.pdf>