

SAFETY ALERT: METHYLENE CHLORIDE

HAZARD RECOGNITION

Methylene chloride is a solvent which is used in many non-flammable aerosol and bulk anti-spatters. Employees exposed to methylene chloride are at increased risk of developing cancer, adverse effects on the heart, central nervous system and liver, and skin or eye irritation. Exposure may occur through inhalation, by absorption through the skin, or through contact with the skin.

OSHA has a comprehensive standard for workplace exposure to methylene chloride. The established permissible exposure limits (PELs) of 25 ppm as an 8-hour time-weighted average (TWA) and 125 ppm as a short-term exposure limit (STEL), the action level for METHYLENE CHLORIDE is 12.5 ppm calculated as an 8-hour TWA.

Employers must establish a regulated area when exposures to airborne concentrations of methylene chloride exceeds or can be expected to exceed either the PEL or STEL. Employers must communicate to employees the health hazards of working with methylene chloride.

Employers must conduct initial monitoring to accurately determine the airborne concentrations to methylene chloride unless objective data exists or monitoring data conducted within previous 12 months exists. A periodic monitoring program must be implemented for tasks where initial monitoring shows employee exposures are above the action level or STEL.

METHODS OF COMPLIANCE

Employers must implement a medical surveillance program for employees exposed to methylene chloride at or above the action level on 30 or more days per year or above the 8-hour TWA PEL or the STEL on 10 or more days per year. OSHA has established specific medical surveillance requirements based upon age and potential exposures.

You must implement effective control measures such as engineering and work practice controls to reduce and maintain employee exposures to methylene chloride. Local exhaust ventilation, general ventilation systems, and special isolation devices or enclosures are examples of engineering controls that must be implemented.

Where engineering controls do not reduce exposures, respirators will be required. Work practice controls can reduce the potential exposures by altering the manner in which a task is performed such as requiring employees to eat, drink, or smoke outside of the regulated area. Administrative controls limit the exposures by assuring shorter durations in the work area such as scheduling the work with highest exposures when fewer employees are working or establishing a rotation schedule.

Respiratory protection should only be relied on after engineering, work practice controls, and administrative controls have been tried and found to be ineffective in reducing the exposures below the PEL. OSHA has also developed requirements for specific respirator use depending upon exposure levels.

Employers should also have, and ensure the use of, washing facilities or safety showers conveniently located to the work area and eyewash stations in the immediate work area for emergency use. Personal protective equipment and clothing will be required to prevent skin and eye exposures and employers must assure that employees do not take home the personal protective equipment or clothing. The employer must also assure that the clothing and equipment is clean, repaired or replaced as necessary, and properly disposed of.

EMPLOYEE TRAINING

The employer must provide information and training to all employees potentially exposed to methylene chloride prior to or when initially assigned to a job. Retraining will be necessary whenever the employer has reason to believe the employee does not have a good understanding of the safe use and handling of methylene chloride.

SOLUTIONS FROM CANTESCO

To replace hazardous methylene chloride based anti-spatters use CANTESCO® water based anti-spatters. For example ES-16-A Premium Water Based Anti-Spatter is an aerosol anti-spatter that is an effective drop in replacement for methylene chloride products in welding applications.

CANTESCO® ES-16-A is a water-based, stable emulsion mixture, free from suspended matter and sediment, has a neutral pH and a rust inhibitor. Does not contain chlorinated solvents or silicone materials, eliminates concerns regarding hazardous decomposition of chlorinated solvents (resulting in toxic fumes of phosgene gas) that are created when using traditional chlorinated solvent based anti-spatter products.

CANTESCO® Surfactant Based Formulas (AS-1G, AS-5G and AS-DR) are also completely exempt from OSHA and WHMIS requirements for hazardous chemical materials and can be used in all welding applications. This low solids formula provides effective anti-spatter coverage in general welding applications.

For robotic welding stations use CANTESCO® ROB robotic welding solution, . Also exempt from OSHA and WHMIS requirements this product is specifically formulated for demanding robotic welding station applications.

All Cantesco water based anti-spatters are non-toxic and exempt from OSHA and WHMIS requirements for hazardous chemical materials. They do not contain materials that are considered to be carcinogens, mutagens or teratogens. Cantesco water based products eliminate strong odor and solvent smells that methylene chloride anti-spatters have and resulting nausea and headaches.