

Instruction Guide APPLYING CIM WITHIN CONFINED SPACES

Confined spaces are those spaces that are difficult to get into and out of and are not intended for occupancy except during repair or maintenance. The Occupational Safety and Health Administration (OSHA), state and local agencies and many facility owners have specific programs and requirements for contractors working within confined spaces. This note outlines issues that need to be addressed within the context of good workplace practices and the requirements of the various agencies and owners, when applying CIM coatings within confined spaces.

Applying CIM in a confined space is likely to result in a hazardous environment by exceeding exposure limits allowed for solvents such as the TWA (Time Weighted Average) or STEL (Short Term Exposure Limit) as set forth in the product MSDS. Generation of airborne isocyanate mists are also possible during spray application of CIM. These conditions can be controlled using adequate ventilation avoiding the need for permits. When airborne solvents and isocyanates become trapped in confined spaces, it is necessary to wear fresh air supplied masks, or properly ventilate the space.

The following is general information on working with CIM in confined spaces. All confined space work should be done in accordance with federal, state, local and facility owner confined space regulations, which may include more restrictive provisions than those listed below.

VENTILATION

The primary limitation when working with CIM in confined spaces is to provide for adequate ventilation. The purpose of ventilating a confined space is to maintain a low level of airborne contaminants. Air movers should be placed to provide fresh air near personnel and to provide adequate mixing of air within the tank. The volume of fresh air supplied to the tank should be consistent with safe practices and regulations but will generally be no less than one air change every four (4) hours in large tanks and one (1) or more air changes per hour in small tanks. Air movers, blowers, and fans must be non-sparking, electrically bonded and grounded to prevent the accumulation and discharge of static electricity. Pneumatic type drills should be used for mixing. When using rollers, squeegees, or spray equipment with adequate ventilation, personnel within the space must wear suitable carbon filter masks. With less than adequate ventilation, personnel must use fresh air supplied masks (e.g. Type C respirators).