Canister Adhesives

The most recent MSDS for Sta'-Put SPH, a popular adhesive commonly used by the film industry, lists it with a Hazard Designation Xn-Harmful which means: Substances and preparations which may cause death or acute or chronic damage to health when inhaled, swallowed or absorbed via the skin.

This product contains Dichloromethane which has a TWA (This is the 8-hour time weighted average (TWA) limit) of 25 ppm and a 2b notation and 1,1,1 2-tetrafluoroethane which has a TWA of 2ppm and a 2b notation which means ACGIH notations A1 and A2 and IARC notations 1, 2A and 2B indicate substances designated as carcinogens under section 5.57(1) of the OHS Regulation.

The WorkSafeBC regulation states:

5.57 Designated substances

- (1) If a substance identified as any of the following is present in the workplace, the employer must replace it, if practicable, with a material which reduces the risk to workers:
 - (a) ACGIH A1 or A2, or IARC 1, 2A or 2B carcinogen;
 - (b) ACGIH reproductive toxin:
 - (c) ACGIH sensitizer;
 - (d) ACGIH L endnote.
- (2) If it is not practicable to substitute a material which reduces the risk to workers, in accordance with subsection (1), the employer must implement an exposure control plan to maintain workers' exposure as low as reasonably achievable below the exposure limit established under section 5.48.
- (3) The exposure control plan must meet the requirements of section 5.54.

Alternate products are listed below and on the reverse side of this document. As always, refer to the MSDS before using any products.

3M ADHESIVE/BONDING PRODUCTS

3M PRODUCT	BASE CHEMISTRY (SOLVENT-BASED, WATER-BASED, OR SOLID ADHESIVE)	USED ON	OPEN TIME (APPLICATIONS ON BOTH SURFACES)	CONTAINER TYPE	NOTES
30NF	Water-based	Wood , fabric, plastic laminate, etc	15 min – 4 hrs.	1 gallon, 5 gallon containers and cylinders	Requires use of a 3M applicator. Not for use on polystyrene.
94CA	Solvent-based	Wood, plastics metal, soft foams, paper, glass	1 min – 30 min.	Cylinder (various sizes)	Requires use of a 3M applicator. Not for use on polystyrene
6111 (low melt)	Solid adhesive (no solvents)	Polystyrene foam, foams, fabrics, thin metals, particle board, etc.	360 sec.	3/" x 3/4" adhesive chips dispersed through heated applicator	Requires use of a 3M applicator. Can apply a bead or film depending on nozzle
3792LM (low melt)	Solid adhesive (no solvents)	Polyolefins, wood, plastics, light-gauge metals, and may work on polystyrene	40 sec. with 1/6" bead	Solid adhesive dispersed through heated applicator	Hand-held "glue gun"- type applicator required
3792LM (low melt)	Solid adhesive (no solvents)	Polyolefins, wood, plastics, light-gauge metals, and may work on polystyrene	40 sec.	Solid adhesive dispersed through applicator. Is a "hot melt" application	Pneumatic applicator required. Same as above but is designed for larger projects

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PRODUCT	BASE CHEMIS TRY	APPLICABLE SUBSTRATES	REGULATORY DISTINCTION	APPLICATIO N METHOD	BENEFITS AND LIMITATIONS	WHY DO PEOPLE CHOOSE THIS PRODUCT?
z	Water- based	Wide variety including wood, plastic laminate, fabric, foam, paper, glass, plastics, etc.	GREENGUARD, meets LEED, South Coast Air Quality Management District (SCQMD), California Air District Regulations, Ozone Transport Commission (OTC)	Various sized canisters, 1 gallon containers, 5 gallon containers	No solvents. No VOCs, No HAPS. Not for use on some vinyls. Excellent heat resistance. Postformable. Non-flammable. Non-chlorinated.	Lowest possible regulatory concern (non-flam, no MC, no solvents, no VOCs, etc). Z dries fast and is easy to work with compared to other water based products. This is a great general purpose product.
Sta'-Put SP80	Solvent- based	Wide variety including wood, plastic laminate, fabric, some foams, paper, glass, plastics, etc.	GREENGUARD, meets LEED, (SCQMD), California Air District Regulations, (OTC)	Aerosol, Various sized canisters, 5 gallon containers	Low VOC formula. Non-chlorinated. Not for use on some vinyls or polystyrene foam.	SP80 meets or exceeds many important regulations. SP80 does not have MC but still offers the speed of a solvent based application. SP80 works on a variety of substrates.
Sta'-Put SP2	Solvent- based	Wide variety including EPS and other foams, wood, plastic laminate, fabric, paper, glass, plastics, etc.		Aerosol, Various sized canisters	Specifically designed for EPS foam applications. Non-chlorinated.	SP2 is an excellent adhesive for many hard to bond foam applications, including polystyrene. SP2 does not include MC.
Sta'-Put 2001M	Solvent- based	Wide variety including wood, plastic laminate, fabric, some foams, paper, glass, plastics, etc.	HAPS free	Various sized canisters	HAPS free. Not for use on some vinyls or polystyrene foam. Unique spray pattern. Non-chlorinated.	2001M is HAPS free and has a unique spray pattern. 2001M does not include MC and can be used on many different substrates.
Sta'-Put SP70	Solvent- based	Wide variety including wood, plastic laminate, fabric, some foams, paper, glass, plastics, etc.		Various sized canisters	Not for use on some vinyls or polystyrene foam. Non-chlorinated.	SP70 does not include MC. SP70 can be used on many different substrates and is a good alternative to MC based products.
Sta'-Put SP4H	Solvent- based	Wide variety including wood, plastic laminate, fabric, some foams, paper, glass, plastics, etc.		Aerosol, Various sized canisters	Excellent heat resistance. Non- chlorinated. Not for use on some vinyls or polystyrene foam.	Great alternative to MC based products while still offering the speed of a solvent based adhesive. SP4H works on a variety of substrates.

Leaend:

MC - Methylene Chloride also known as Dichloromethane

SCQMD – South Coast Air Quality Management District (California)

OTC - Ozone Transport Commission (Northeast and Mid-Atlantic USA)

LEED – Leadership in Energy and Environmental Design

VOC - Volatile Organic Compound

HAPS – Hazardous Air Pollutants

Postformable - The term 'postforming' describes the process of bending high pressure laminate into simple cylindrical concave or convex curves. Only select adhesives can withstand the heat required to postform.

Non-chlorinated – Contains no chlorinated solvents (including methylene chloride).