

Tecoflex® 1MP Adhesive

Type: The adhesive is a solution of a polyurethane based polymer in methyl ethyl ketone and methylene chloride

Features: Medical Grade Tecoflex® 1-MP is a one-part adhesive based on a fast-crystallizing polyurethane resin. The adhesive has been used with good results on the following substrates: polyurethanes, plasticized vinyls, polycarbonates, acrylics, chlorinated SBR rubbers, and primed metals.

Physical Properties	Value	Units	Test Method
Solids	8	%	by weight
Brookfield Viscosity	200 – 300	cps	Model RVF, Spindle #2, at 50 RPM @ 70°F
Color	light gray, translucent appearance	visual	Appearance
			Lubrizol Method 90° in tension with a cross-head speed of 20 in / min.

These test results are based on small samples of Tecoflex 1-MP Adhesives and do not necessarily represent average results from larger test samples. This information should not be used for establishing engineering or manufacturing guidelines. Adhesive Bond Strength specimens were prepared by applying three coats of adhesive to clean specimens followed by air dry for six hours. Specimens were heat activated with IR lamps, plied together under 1000 psi pressure for one minute, and cured for 24 hours at 24°C.

Directions for Use:

The adhesive can be used in two ways: either as a pressure sensitive bonding agent, or as a delayed-action adhesive, where coated parts can be stacked and subsequently reactivated by either infrared heating or solvent wipe. Both surfaces to be adhered should be cleaned thoroughly with alcohol and allowed to dry. 1-MP adhesive is applied to both surfaces with a brush, roller or other applicator and air dried. This procedure should be repeated until 3 coats of adhesive have been applied to both surfaces. The adhesive may be activated using an infrared source. Upon activation, the two surfaces are plied together under light pressure until adequate bonding has developed (usually about one minute). Total adhesive strength is achieved in about 24 hours. Alternatively, the adhesive may be activated by wiping the two surfaces with a small amount of methyl ethyl ketone. The surfaces are then plied together as described above.

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Precautions:

The adhesive should be used in a well-ventilated area to minimize worker exposure to vapors. The adhesive will retain potency for at least 18 months in sealed in original container and not exposed to ultraviolet light. Some settling may occur during storage. This will not decrease the adhesion capability. It is recommended that the adhesive be shaken or stirred for 2 minutes prior to use. Since the adhesive is a thixotropic solution, its viscosity will be lowered upon application of shear forces. To lower viscosity, the adhesive should be diluted using a mixture of methylene chloride and methyl ethyl ketone in a 60:40 ratio by weight. In high humidity, water droplets may condense on the drying film due to the cooling effect of evaporating solvent. Water interferes with bonding. This condition can be avoided by controlling ambient humidity.

Note: Due to flammability of this product, special packaging is required for overseas air shipments.

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