

Product Technical Datasheet DP11-83 Slow Pink Urethane Adhesive

DP-11-83 is a low viscosity, quick setting, easy to use adhesive and/or casting material. This product was designed to bond together the MB1200 foam board to create desired dimensions in length, width and height. DP-11-83 has a working life of up to 13 minutes for casting applications. If used as an adhesive, it is workable for up to 16 minutes.

Working Properties

Mix Ratio (by weight)	1 to 1
Viscosity (ASTM-D-2393)	
Part A	1,400 cps
Part B	3,100 cps
Mixed (1 Minute)	2,200 cps
Working Life (1/2 lb. mass) 75E F	14 - 16 minutes
Gel Time (ASTM-D-2471)	15 - 16 minutes
*Demold Time (Cast) 75EF	3 to 4 hours
*Demold Time (Adhesive) 75EF	6 to 8 hours

Physical Properties

Specific Gravity, Cured (ASTM-D-792-66)	0.77 grams/cc
Weight/cu.in. (lbs.)	0.028
Hardness, Shore D (ASTM-D-2240)	64
Tensile Strength (ASTM-D-638)	**
Flexural Strength (ASTM-D-790)	**
Flexural Modulus (ASTM-D-790)	**
Compressive Strength (ASTM-D-695)	**
Impact Resistance	**
Heat Distortion (EF) (ASTM-D-648-56)	**
Lineal Shrinkage (ASTM-D-2566-69)	**
*Dependent upon wall thickness of casting	
**To be determined	

Handling Properties

DP-11-83 Urethane Adhesive is a quick-setting, two part casting system which requires careful preparation prior to mixing parts A and B. Because DP-11-83 contains components having very low density, there will be some separation at the surface of the material in its container. Using a paint shaker, jiffy mixer, or mixing spatula, resuspension of the ingredients is easily accomplished. Precaution should be taken to prevent any moisture contamination from containers or utensils. It is recommended that the work area be well ventilated and normal cleanliness and safety rules be observed. Avoid prolonged exposure to vapors and contact with skin.

Preparation of Mold Surface for Casting Applications

Clean the surface from dust and possible presence of moisture. Apply BC 87 Parting Agent and polish to a uniform high gloss finish (usually 2-3 coats are recommended). For wood surfaces, 2-3 coats of a quality sanding sealer is necessary. For plaster surfaces, seal with PVC sealer to ensure complete absence of moisture. For both wood and plaster surfaces, follow with 2-3 coats of BC 87 Parting Agent.

Mixing and Pouring for Casting Applications

Pour weighted or measured amounts of Part A & B into a separate dry container by pouring Part A into Part B. Mix with a spatula or mechanical stirrer for 1 minute for quart size batches or 1 1/2 - 2 minutes for gallon batches. Immediately pour mixed resin uninterrupted from a convenient height above the mold cavity to resist air bubble entrapment. Clean your mixing tools by rinsing in an alcohol type solvent. Larger masses (2 feet or more) may be built up with successive pours. Castings may be demolded within 2 to 3 hours but should be properly supported while "green". Under normal conditions, maximum hardness or cure will be achieved in 12-18 hours.

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