

BETAMATE™ 120

Structural Adhesives

BETAMATE™ 120 is a one component, highly toughened epoxy based adhesive, especially developed for the body shop. The adhesive is used in the car to increase performance and body stiffness

Benefits and Features

Has excellent adhesion to a variety of substrates found in the body shop such as galvanized steels and aluminum. It has good tolerance to oily and dry lubes found in all automotive environments. The product increases the stiffness and crash durability of the entire car body. BETAMATE™ 120 exhibits excellent corrosion resistance and is compatible with other mechanical and thermal joining techniques as well as the entire e-coat process. It is typically used in all areas of the vehicle body structure. BETAMATE™ 120 viscosity has been optimized for ease of pumpability while still providing premier wash off resistance as well as a sag resistant bead profile.

Product information

Colour	Purple	
Density	1.14 g/cm ³	ISO 845
Solid content	99 %	

Rheological properties

Viscosity, Casson	≥45 Pa.s
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Typical mechanical properties

Tensile Modulus	1800 MPa	ASTM D 638
Stress at break	30 MPa	ISO 527-1/-2
Strain at break	4 %	ISO 527-1/-2
Lap shear strength	≥30 MPa	DIN EN 1465
Peel strength, T-Peel	7.9 ^[2] N/mm	ISO 11339
Peel strength, Impact-Peel	25 N/mm	ISO 11343

[1]: 1.6mm CRS substrate

[2]: 0.8mm HDG substrate

Additional information

Adhesives

Surface Preparation

The material is designed for use in the body shop area conditions where it is designed to tolerate typical oily substrates up to 5g/m² of surface oil

Application

All Dupont adhesives products are primarily developed in cooperation with the automobile manufacturers, according to their needs and specifications, they are approved for the specific applications as defined by the customer. The use of the product other than approved application must be released in written



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form by the Technical service department of DuPont Adhesives

Application Equipment

Cartridges: hand-operated or pneumatic heated gun with mechanical piston
Drums/Pails: Pumping system with zoned heat capability

Application Parameters

The product is cold pumpable and can be applied as bead / swirl / jet-spray.
The ideal material temperature for conveying is >18°C. It can be processed with the following parameters:

Application speed: up to 500 mm/s

Temperature follower plate: unheated possible; >18°C

Temperature follower plate to doser: Per heating zone 5°C heat increase, temperature at doser 40-55°C

Temperature nozzle: 45 - 65°C

For an optimum tack of the adhesive, the parts to bond should be stored at 16°C or higher.

In case of an application break longer than 30 minutes the heating of the application equipment should be switched off.

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