

New DuPont™ BETAMATE™ Flex Structural Adhesives Provide up to 10X Elongation for Body Shop Bonding



Manufacturing and performance benefits

BETAMATE™ Flex technology is easy to adopt in the body shop since it doesn't require any infrastructure changes for application. These versatile adhesives offer:

- high elastic properties after cure
- ability to join dissimilar materials
- robust adhesion to aluminum and steel
- suitability for cold-applied processing
- compatibility with electrocoat processes and wash-off resistance

Vehicle performance also benefits because BETAMATE™ Flex technologies offer:

- high peel strength and impact toughness for superb crash durability
- excellent sealing ability
- excellent resistance to galvanic corrosion
- enhanced damping performance of bonded components

A bold new family of automotive adhesives for joining dissimilar materials has joined the DuPont lineup: BETAMATE™ Flex.

While typical crash-durable adhesives (CDAs) afford less than 20% elongation, DuPont™ BETAMATE™ Flex technologies deliver the flexibility and toughness of elastic polyurethane adhesives to the body shop for improved design freedom on aluminum and steel joining.

Applications

BETAMATE™ Flex helps achieve lightweighting goals and is ideal for adhering:

- roofs
- door panels
- closures
- body structures
- components
- liftgates

Three BETAMATE™ Flex Choices

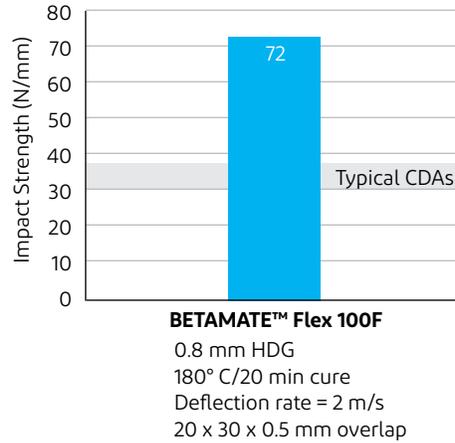
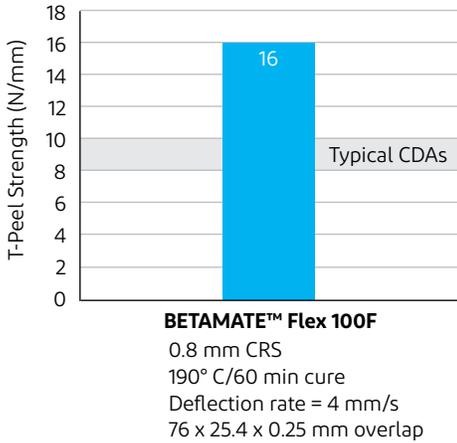
Low modulus and high elongation make BETAMATE™ Flex ideal for minimizing residual strain and distortion to Class A surfaces. It is available in three grades for a broad variety of automotive applications.

BETAMATE™ Flex Product Selector

Adhesive	Standard CDA	Flex 1822	Flex 100C	Flex 100F
E-Modulus [MPa]	2000	1000	400	60
Elongation at break	8%	15%	73%	220%
Tensile Strength [MPa]	32	20	12	8
Lap Shear Strength [MPa]	32	21	15	11
Impact Peel Strength @ 23 °C [N/mm]	43	25	35	72

BETAMATE™ Flex 100F provides toughness and flexibility

BETAMATE™ Flex 100F provides superior resistance to static and dynamic peel forces. This means auto designers can eliminate bolts and rivets in areas subject to peel forces as well as eliminate unzipping that's common to laser welds.



Source: DuPont

Customized Solutions

DuPont has 10 major Research & Development Centers around the globe where we collaborate with OEMs and suppliers on customized automotive solutions. Our technicians will work with you to develop BETAMATE™ structural adhesives that:

- enable lightweighting
- bond multiple materials
- enable vehicle crash management
- bond hard-to-weld substrates

For more information, contact your DuPont representative.

dupont.com/mobility



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