

BETAMATE™ 1060N US

Structural Adhesives

BETAMATE™ 1060N is a one component, epoxy based adhesive especially developed for the body shop. The adhesive is used in the car to increase the operation durability, the crash performance and the body stiffness.

Properties

- Excellent adhesion to automotive steels, including coated steels and pretreated aluminium with good tolerance to oil and drylubes
- Stiffness and crash stability increase of the entire car body
- High durability of the adhesive and the adhesive bond
- Protection of the metal and weld points against corrosion due to its sealing capability
- Compatible with other mechanical and thermal joining techniques
- Compatible with the electrocoat process and wash-off resistant
- Precurable
- Up to eight weeks open time in the uncured bond
- UV light detectable

Product information

Colour	Blue	
Basis	epoxy resin	
Density	1.3 g/cm ³	ISO 845
Solid content	≥99 %	

Rheological properties

Viscosity, Casson	≥75 ^[1] Pa.s
[1]: 50°C, D(1s) 1.075	

Application technique

Open time	≤2 h
Processing temperature	30 - 65 °C

Cure conditions

Curing time	0.5 h
Cure temperature	180 °C

Typical mechanical properties

Tensile Modulus	2900 MPa	ISO 527-1/-2
Stress at break	40 MPa	ISO 1798
Strain at break	4 %	ISO 527-1/-2
Lap shear strength, 3 days	≥26 MPa	DIN EN 1465
Peel strength, T-Peel	9 N/mm	ISO 11339



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Peel strength, Impact-Peel

23 N/mm

ISO 11343

Thermal properties

Glass transition temperature, 10°C/min

110 °C

ISO 11357-1/-3

Storage and stability

Shelf life

270^[2] days

[2]: storable at temperatures below room temperature

Characteristics

Compatibility

Metals

Additional information

Adhesives

Bonding Surface Preparation

The material has been designed to tolerate up to 5 g/m² of surface oil.

Application Tool

Cartridges: hand-operated or pneumatic heated gun with mechanical piston.
Drums, pails: heated pumping system.

Application

The product is applicable as a bead. It can be applied with the following parameters:

application speed : up to 300 mm/s

temperatures recommended:

follower plate: 30 - 40°C

follower plate – dozer : per heating zone approx. 5°C heat increase. 40 - 55°C

nozzle : 50 - 65°C

For an optimum tack of the adhesive, the parts to bond should be stored at 15°C or higher. In case of an application break longer than 2 hours the heating of the application equipment should be switched off.

Cleaning

Uncured material can be removed with BETACLEAN 3510. Attention: The contact with bonded areas should be avoided.

Health and Safety



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The material curing reaction is exothermic. If the material is held in bulk the reaction is accompanied by a rapid build-up of exothermic heat. To avoid the risk of this bulk exothermy, containers of the material should in no circumstances be heated by e.g. hot plates or simple drum heaters. If heating a bulk quantity of the material is considered necessary, advice should be sought.

DuPont

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