Dow Automotive

Technical Data Sheet
BTR

BETAMATE E 2700 (A+B)

Description / Application:

BETAMATE E 2700 is a high-viscosity adhesive sealant based on polyurethane. It consists of BETAMATE E 2700 A (PU adhesive) and BETAMATE E 2700 B (accelerator). BETAMATE E 2700 is a proven product of the BETASEAL series. It provides industry with a polyurethane adhesive sealant which features rapid curing characteristics and ideal final state properties. Rapid curing is promoted by the accelerator and is completely independent of the prevailing atmospheric humidity.
A significant advantage offered by the system is that its almost complete sensitivity to the mixing ratio has absolutely no effect on the final state properties. It is therefore possible to match the open time and handling strength to any particular requirements. Depending on the mixing ratio and the temperature of the material, components bonded with BETAMATE E 2700 are self-supporting after only a few minutes. A perfect joint also results when the components are united 20 to 40 min. after the adhesive has been applied.
BETAMATE E 2700is satisfactory for use in bonding mixed substrates.
BETAMATE E 2700 is cost-effective and ecologically acceptable. The mixing unit is cleaned directly with BETAMATE E 2700 A (BETASEAL-components); not, as it is normal with solvents. There are no flushing losses whatsoever since the flushing agent is used as an adhesive.

All Dow Automotive products are primarily developed in co-operation with the automobile manufacturers, according to their needs and their specifications; they are approved for the specific applications as defined by the customer.

The use of the product other than approved application have to be released in written form by the Technical Service of Dow Automotive.

Technical Data:

Basis	polyurethane prepolymers
Colour	black
Density	Comp. A: 1.25 g/cm^3 Comp. B: 1.26 g/cm^3 at 23°C
Solid contents (GM 042.0)	> 98%
Viscosity (Extrusion, Ballan 4 mm nozzle, 4 bar)	pasty, pumpable Comp. A+B 14+/-4 g/min at 23°C
Flash point	> 100°C
Processing temperature	10-40°C
Working time (processing time)	approx.: 5 - 25 min, at 23°C, depending on mixing ratio
Sagging behavior	very good, non-sagging
Tack free time	approx.: 10 - 50 min, at 23°C, depending on mixing ratio
Cure rate	depending on mixing ratio and environmental temperature. For more information, please call our Application Support
Tensile strength (DIN 53504)	> 5.5 N/mm^2
Elongation at break (DIN 53504)	> 600%
Resistance to tear propagation (DIN 53515)	aprox. 16 N/mm depending on mixing ratio
Shore A hardness (DIN 53505)	55+/-5
Abrasion resistance	Extremely high
Temperature stability	-40°C to 100°C, for short periods up to 140°C

Resistance to chemicals	Highly resistant to aqueous chemicals, petrol, alcohol and mineral oils. Conditionally resistant to esters, ketones, aromatics and chlorinated hydrocarbons
Bonding surface preparation	All bonding surfaces must be free of dirt, dust, water, oil and grease. In general surfaces should be primed. Verify compatibility or consult our technical service department.
Processing equipment	Commercial two-component pump system with mixer. Please inquire which systems are approved by Gurit-Essex for the processing of BETAMATE E 2700. Facilities for connecting to an automatic application system.
Cleaning	Flush the mixer and the application nozzle with BETAMATE E 2700 A. Unhardened BETAMATE E 2700 residues can easily be removed with BETACLEAN 3000 or 3500. Hardened BETAMATE E 2700 can only be removed mechanically.
Shelf life	6 months at +5°C to +25°C in unopened containers. (See "use before" date)
Containers	pails: 22 liters Drums: 200 liters Repair kits
Protection measures	See health and safety data sheet.

Dow Automotive Quality Management

Quality is our highest priority. Dow Automotive works with a highly modern Quality Management System which meets all international requirements of **QS 9000, VDA-6** and **ISO 9001**.

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