

DanBond E11-1

General Purpose Rapid Epoxy Adhesive

DanBond E11-1 can be used on numerous materials such as metal, plastic, fibre reinforced materials, ceramics, glass, stone and wood. It is suited for manufacturing processes with assembly and positioning carried out at different times.

FEATURES:

- High adhesive force
- Viscous, self-levelling Long pot life
- Slow-curing

APPLICATIONS:

- Can be used on numerous materials such as metal, plastic, fibre reinforced materials, ceramics, glass, stone and wood.

Technical Data

Composition	Epoxy resin unfilled
Colour	Slightly yellow, clear
Mixing ratio by weight (Resin / Hardener)	1:1
Density of the mixture	1,7 g/cm ³
Viscosity of the mixture at 20°C (+68°F)	7500 mPa·s
Adhesive gap bridging up to max.	2 mm
Processing temperature	+10 to +40 °C
Curing temperature	+10 to +40 °C
Pot-life at 20°C (+68°F) for 10ml material	45 min.
Handling strength (35% strength) after	120 min.
Working strength after (50% strength) after	24 h
Final strength (100%) after	72 h
Medium strength of the pure epoxy resin according to DIN 53281-83	
Pressure	2 Mpa
Pull	35 Mpa
Bending strength	50 MPa
E-Modul	2.000 - 2.500 Mpa
Hardness (Shore D) DIN ISO 7619	55
Medium shear strength according to DIN 53283 at	
Steel sand blasted	17 N/mm ²
Alu sandblasted	16 N/mm ²
PVC hard-roughened	11 N/mm ²
Linear shrinkage	2%
Temperature resistance	-50 - 100°C

SURFACE PREPERATION

All surfaces must be clean, dry, dust and grease free before application. Use a suitable solvent (acetone or isopropanol) for the degreasing of most surfaces.

Best result will be achieved with surfaces that have been lightly abraded immediately prior to bonding.

Processing

DanBond E11-1 can be processed directly from the double cartridges with the help of the included static mixer. Reject the first 5 cm of the dosed bead. Apply adhesive to only one of the surfaces to be bonded. The pot life given is for a material quantity of 10 ml at room temperature. If larger quantities are used, the curing time will be faster. Similarly, higher ambient temperatures shorten the cure times (as a rule of thumb, every +10°C increase above room temperature will halve working and curing time). Temperatures below +16°C will extend working and curing times considerably, while below about +5°C, no reaction will take place at all.

Directions for Use

Cartridges:

- 1) Insert the cartridge into the application gun
- 2) Remove the cartridge end cap and dispense a small amount of material to balance the cartridge.
- 3) Attach the correct static mixer to the end of the cartridge and begin dispensing the material.
- 4) Apply material to one of the substrates and then join the parts. Parts must be joined within the working time of the adhesive
- 5) Excess adhesive can be wiped away with organic solvent.

Adhesive bond should be allowed to develop full strength before subjecting to any service loads.

PACKAGING

DanBond E11-1 is available in 50 ml Cartridges.

HANDLING PRECAUTIONS

Please refer to the relevant SDS (Safety Data Sheet) regarding the safe handling of this material.

Note: *All materials, whether innocuous or not, should be handled in accordance with the principles of good industrial hygiene.*

Further technical support or information may be obtained from

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