

DanBond E12

General Purpose Rapid Epoxy Adhesive

DanBond E12 is a rapid curing, multipurpose, two component, room temperature curing, liquid adhesive of high strength and toughness.

It is suited for quick repair and maintenance work and is ideal for industrial series production with short cycle times.

FEATURES:

- Extremely high adhesive force viscous
- Resistant to high temperaturesVery short pot life
- Fast-curing

APPLICATIONS:

- Ideal for bonding all types of Fiberglass, PBT, Epoxy, Wood, RIM, Nylon, FRP, Polyesters, Styrene, Stainless Steel etc.

Technical Data

Composition	Epoxy resin unfilled
Colour	Pale yellow, Transparent
Mixing ratio by weight (Resin / Hardener)	1:1
Density of the mixture	1,2 g/cm ³
Viscosity of the mixture at 20°C (+68°F)	5000 mPa·s
Adhesive gap bridging up to max.	2 mm
Processing temperature	+10 to +30 °C
Curing temperature	+6 to +40 °C
Pot-life at 20°C (+68°F) for 10ml material	4 - 5 min.
Handling strength (35% strength) after	15 min.
Working strength after (50% strength) after	20 min.
Final strength (100%) after	24 h
Mechanical properties after curing	
Tensile strength DIN EN ISO 527-2	52 Mpa
E-modulus (tensile) DIN EN ISO 527-2	2.000 - 2.200 MPa
Compressive strength DIN EN ISO 604	55 Mpa
Bending strength DIN EN ISO 178	58 MPa
Hardness (Shore D) DIN ISO 7619	83
Lap shear strength material thicken. 1,5mm DIN EN 1465	
Shore hardness D	65
Medium shear strength according to DIN EN 1465 at	
Steel 1.0338 sandblasted	22 N/mm ²
Stainless steel V2A sandblasted	26 N/mm ²
Aluminium sandblasted	11 N/mm ²
Galvanized steel	16 N/mm ²
PVC-rigid roughened	13 N/mm ²
Thermal parameters	
Temperature resistance	-50 to +180 °C
Tg after curing at room temperature (DSC)	44,7 °C
Tg after tempering (at 90°C) (DSC)	46,1 °C
Temperature conductivity	0,133 mm ² /s
Thermal conductivity DIN EN ISO 22007-4	0,24 W/m·K
Heat capacity DIN EN ISO 22007-4	1,482 J/(g·K)

Electrical parameters		
Resistance	DIN EN 62631-3-1	$1,03 \cdot 10^{11} \Omega \cdot m$
Dielectric strength	DIN EN 60243-1 (20°C)	20 kV/mm

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.

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 E12 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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