

## Baxxodur<sup>®</sup> EC 210

### Amine curing agent for the epoxy industry

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® = registered trademark of BASF SE

#### System description

Baxxodur EC 210 is a cycloaliphatic amine based curing agent with low viscosity and a moderate reactivity.

#### Features

- High temperature resistance
- High mechanical strength
- Excellent chemical and moisture resistance

#### Applications

- Structural adhesive
- Flooring, grout, coating, etc. in construction
- Composite lamination
- Casting and encapsulation
- Heavy duty protective coating

#### Characteristics (typical values)

##### Curing agent

Chemical properties	Value	Unit	Method
Purity	min. 99.0	[%]	GC
Water	max. 0.5	[%]	DIN 51777
Color	max. 50	APHA	DIN EN 1557
Refractive Index at 20 °C	1.487	-	DIN 51423
Density at 20 °C	0.94	[g/cm <sup>3</sup> ]	DIN 2811-3
Amine Value	~ 870	[mg KOH/g]	DIN 16945
Viscosity at 20 °C	~ 8	[mPa*s]	DIN 3219

**Mixing**  
(parts by weight)

Component	Parts by weight
Standard Epoxy Resin based on Bisphenol-A (EEW = 185 g/Eq)	100
Baxxodur® EC 210 (AHEW = 33 g/Eq)	18

**Processing**  
(typical values)

Mixing Properties	Value	Unit	Test method
Viscosity of mixture at 23°C	1300	[mPa*s]	DIN EN ISO 3219
Open time at 23°C <sup>1</sup>	69	[min]	DIN 16945 <sup>2</sup>
Time to reach 6 Pa*s at 23°C	131	[min]	DIN 16945 <sup>2</sup>
Time to reach 6 Pa*s at 45°C	69	[min]	DIN 16945 <sup>2</sup>
Time to reach 6 Pa*s at 75°C	17	[min]	DIN 16945 <sup>2</sup>
Gel point at 70°C	51	[min]	ASTM D4473 <sup>3</sup>
Gel point at 90°C	25	[min]	ASTM D4473 <sup>3</sup>
Gel point at 110°C	7	[min]	ASTM D4473 <sup>3</sup>

<sup>1</sup> Time to double the initial mix viscosity<sup>2</sup> Anton Paar rheometer; plate-plate diameter: 25 mm; gap: 1mm; shear rate of 100 1/s<sup>3</sup> Anton Paar rheometer; plate-plate diameter: 25 mm; gap: 1 mm; oscillation**Cured Resin**  
(typical values)

Epoxy resin cured with Baxxodur EC 210 for 2h at 80°C, 2h 100°C, 2h 100°C, 2h 120°C, 2h 140°C, 2h 160°C

Mechanical Properties	Value	Unit	Test method
Tg	75	[°C]	DSC, mod., 5 K/min
HDT	73	[°C]	DIN EN ISO 75-2
Tensile strength	53	[MPa]	DIN EN ISO 527-2
Tensile modulus	2391	[MPa]	DIN EN ISO 527-2
Tensile elongation at F <sub>max</sub>	4.9	[%]	DIN EN ISO 527-2
Flexural strength	86	[MPa]	DIN EN ISO 178
Flexural modulus	2487	[MPa]	DIN EN ISO 178
Charpy (impact strength)	73	[kJ/m <sup>2</sup> ]	DIN EN ISO 179-1

*Additional technical data for this product is available upon request.***Contact**E-Mail: [info.intermediates@basf.com](mailto:info.intermediates@basf.com)Internet: [www.intermediates.basf.com](http://www.intermediates.basf.com)**Note**

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