

## Baxxodur<sup>®</sup> EC 130

### Amine curing agent for the epoxy industry

July 2018 | [Data Sheet](#) | Replaced Version October 2013

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® = registered trademark of BASF SE

#### System description

Baxxodur EC 130 is a polyether amine based curing agent with low viscosity and a high reactivity.

#### Features

- Excellent thermal shock resistance, especially under low temperature conditions
- Excellent adhesion
- Excellent toughness
- Good flexibility
- Low color

#### Applications

- Structural adhesive
- Composite lamination

#### Characteristics (typical values)

##### Curing agent

Chemical properties	Value	Unit	Method
Purity	min. 98	[%]	GC
Water	max. 0.2	[%]	DIN 51777
Color	max. 40	APHA	DIN EN 1557
Refractive Index	1.4650	-	DIN 51423
Density at 20 °C	1.01	[g/cm <sup>3</sup> ]	DIN 2811-3
Amine Value	~ 505	[mg KOH/g]	DIN 16945
Viscosity at 20 °C	~ 13	[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 130 (AHEW = 56 g/Eq)	30

**Processing**  
(typical values)

Mixing Properties	Value	Unit	Test method
Viscosity of mixture at 23°C	510	[mPa*s]	DIN EN ISO 3219
Open time at 23°C <sup>1</sup>	61	[min]	DIN 16945 <sup>2</sup>
Time to reach 6 Pa*s at 23°C	159	[min]	DIN 16945 <sup>2</sup>
Time to reach 6 Pa*s at 45°C	56	[min]	DIN 16945 <sup>2</sup>
Time to reach 6 Pa*s at 75°C	12	[min]	DIN 16945 <sup>2</sup>
Gel point at 70°C	21	[min]	ASTM D4473 <sup>3</sup>
Gel point at 90°C	7	[min]	ASTM D4473 <sup>3</sup>
Gel point at 110°C	2	[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 130 for 2h at 80 °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.*

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**Note**

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