

High Biobased Laminating System

High Biobased Epoxy Resin for general laminations and coatings.

**Product
Overview**

ONE is a general purpose laminating resin with high biobased content for composite laminating, coating, and adhesive applications. This system features a faster speed, low viscosity and includes quick air-releasing properties ideal for fibre-reinforced composite laminations and coatings. ONE is a USDA Certified BioPreferred® Product with 30% biobased content.

ONF
FAST

ONS
SLOW

MECHANICAL DATA		
Tensile Modulus (ASTM D638)	2.7 GPa	3.2 GPa
Tensile Strength (ASTM D638)	53.2 MPa	67.6 MPa
Elongation (ASTM D638)	6%	6%
Flexural Modulus (ASTM D790)	2.5 GPa	3.0 GPa
Flexural Strength (ASTM D790)	82.1 MPa	100.5 MPa
Compression Strength (ASTM D695)	77.9 MPa	86.3 MPa
Tg Ultimate (DSC, midpoint)	63°C	53°C
Hardness (Shore D)	70-80	70-80
PROCESSING DATA		
Mix Ratio (by volume)	2:1	2:1
Mix Ratio (by weight)	100:43	100:43
Viscosity (A/B/Mixed @ 25 °C)	1870/120/1020 mPas	1870/140/1060 mPas
Component Density (specific density @ 25°C)	1.14 (resin), 0.98 (hardener) gcm ⁻³	1.14 (resin), 0.98 (hardener) gcm ⁻³
Mixed Density (specific density @ 25°C)	1.09 gcm ⁻³	1.08 gcm ⁻³
Pot Life (@ 25°C)	18 min	43 min
Tack Free Time (@ 35°C)	3 hrs	8 hrs
Recommended Full Cure	7 days @ 25°C	7 days @ 25°C, Post cure recommended
ENVIRONMENT DATA		
VOC Content (ASTM D2369)	21.0 g/l	7.7 g/l
Biobased Carbon Content (ASTM D6866)	28%	21%

These are typical properties and cannot be construed as a specification. The end users should test the products to ensure the products are suitable for the intended application. Any information, data, advice or recommendation published by Wessex Resins or obtained from Wessex Resins by other means and whether relating to Wessex Resins' materials or other materials, is given in good faith and believed to be reliable.

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