

305 Compression Moulding System

High Bio-Content, General Purpose Liquid Epoxy Resin.

Product Overview

305 is a compression moulding resin for fast cycle times in heat-assisted moulding processes of fibre-reinforced composites. The 305 System delivers a high bio-content, excellent fibre wetting qualities and thixotropic characteristics to limit sag in high-temperature cure applications. A high modulus combined with excellent elongation properties enable durable yet lightweight composite parts. 305 is a USDA Certified BioPreferred® Product with 28% biobased content.

CPF
FAST

CPS
SLOW

MECHANICAL DATA		
Tensile Modulus (ASTM D638)	3.4 GPa	3.2 GPa
Tensile Strength (ASTM D638)	73.1 MPa	68.9 MPa
Elongation (ASTM D638)	6.2%	7%
Flexural Modulus (ASTM D790)	3.0 GPa	2.9 GPa
Flexural Strength (ASTM D790)	109.4 MPa	102.0 MPa
Compression Strength (ASTM D695)	84.1 MPa	81.4 MPa
Tg Ultimate (DSC, midpoint)	66°C	68°C
Hardness (Shore D)	70-80	70-80

PROCESSING DATA		
Mix Ratio (by volume)	2:1	2:1
Mix Ratio (by weight)	100:40	100:38
Viscosity (A/B/Mixed @ 25 °C)	3360/1656/1994 mPas	3360/528/1546 mPas
Component Density (specific density @ 25°C)	1.13 (resin), 0.99 (hardener) gcm ⁻³	1.13 (resin), 0.96 (hardener) gcm ⁻³
Mixed Density (specific density @ 25°C)	1.09 gcm ⁻³	1.08 gcm ⁻³
Pot Life (@ 25°C)	20 min	50 min
Tack Free Time (@ 35°C)	N/A	N/A
Recommended Full Cure	15 min @ 82°C	20 min @ 82°C

ENVIRONMENT DATA		
VOC Content (ASTM D2369)	1.2 g/l	0.05 g/l
Biobased Carbon Content (ASTM D6866)	29%	32%

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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