TDS

TECHNICAL DATA SHEET

ENTROPY RESINS®

305 Compression Molding System

High Bio-Content, General Purpose Liquid Epoxy Resin

Product Overview

305 is an industrial compression molding resin for fast cycle times in heat-assisted molding processes of fiber-reinforced composites. The 305 System delivers a high bio-content, excellent fiber 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)	495,800 psi (3.4 GPa)	461,225 psi (3.2 GPa)
Tensile Strength (ASTM D638)	10,600 psi (73.1 MPa)	10,000 psi (68.9 MPa)
Elongation (ASTM D638)	6.2%	7%
Flexural Modulus (ASTM D790)	438,520 psi (3 GPa)	416,280 psi (2.9 GPa)
Flexural Strength (ASTM D790)	15,870 psi (109.4 MPa)	14,800 psi (102 MPa)
Compression Strength (ASTM D695)	12,200 psi (84.1 MPa)	11,800 psi (81.4 MPa)
Tg Ultimate (DSC, midpoint)	177°F/66°C	180°F/68°C
Hardness (Shore D)	70-80	70-80
PROCESSING DATA		
Mix Ratio (by volume)	2:1	2:1
Mix Ratio (by weight)	100:44	100:38
Viscosity (A/B/Mixed @ 77°F/25°C)	3360/1656/1994	3360/528/1546
Component Density (specific density @ 77°F/25°C)	1.13 (resin), 0.99 (hardener)	1.13 (resin), 0.96 (hardener)
Mixed Density (specific density @ 77°F/25°C)	1.09	1.08
Pot Life (@ 77°F/25°C)	20 min	50 min
Tack Free Time (@ 95°F/35°C)	N/A	N/A
Recommended Full Cure	15 min @ 180°F/82°C	20 min @ 180°F/82°C
ENVIRONMENTAL DATA		
VOC Content (ASTM D2369)	0.01 lbs/gal (1.20 g/L)	0.00 lbs/gal (0.05 g/L)
Mixed Biobased Carbon Content (ASTM D6866)	29%	32%

This technical information is provided in good faith and is based on the best knowledge of Gougeon Brothers, Inc. We cannot guarantee this data because conditions of product use are beyond our control.

AMERICAS
ENTROPY RESINS
info@entropyresins.com
310.882.2120

100 Patterson Ave., Bay City, MI 48706
entropyresins.com

SUPER SAP® FORMULATION

USDA CERTIFIED BIOBASED PRODUCT

1% FOR THE PLANET