TECHNICAL DATASHEET

CYCOM® 7701 Epoxy Resin

Description:

CYCOM® 7701 resin is a 250°F (121°C) curing epoxy resin designed for use in structural laminates and honeycomb core sandwich panels for aircraft exteriors. In the prepreg form it has excellent drape and tack.

CYCOM® 7701 was created for autoclave fabrication; however, it can also be press molded and vacuum bag cured.

The recommended lay-up procedure for 7701 epoxy resin is L-3 or L-6. The recommended cure procedure is C-6 or C-7.

For more information, contact:
Cytec Engineered Materials
Technical Service
Anaheim, California 92806
714 630-9400

Features and benefits:

- **250°F (121°C) cure**
- **200°F (93°C) dry service temperature**
- **Laminate and sandwich panel usage**
- **Self-extinguishing and solvent resistant**
- **Self-adhesive to honeycomb core**
- **Autoclave, press-mold or vacuum bag processing**
- **Shelf life 6 months at 0°F (-18°C)**
  10 days at 72°F (22°C)

This information is provided for informational purposes only and without legal responsibility.
Users are expected to perform adequate verification and testing to ensure that materials meet required specifications.

Cytec ENGINEERED MATERIALS
CREATING A MATERIAL ADVANTAGE

Typical properties

E-Glass fiber reinforced crowfoot satin fabric

Typical Cytec Engineered Materials product code: MXB 7701/120

Mechanical properties	-65°F (-54°C)	RT	180°F (82°C)
0º Tensile properties			
Strength, ksi	56-61	60-63	45-51
Modulus, Msi	2.7-3.0	2.4-2.7	2.3-2.6
Strength, Mpa	*386-42 1*	*414-434*	*310-352*
Modulus, Gpa	*19-21*	*17-19*	*16-18*
0° Compressive properties			
Strength, ksi	61-65	63-67	46-5 1
Modulus, Msi	2.7-3.0	2.4-2.7	2.3-2.6
Strength, Mpa	*421-448*	*434-462*	*317-352*
Modulus, Gpa	*19-21*	*17-19*	*16-18*
Interlaminar shear properties			
Strength, ksi	---	4.7-4.9	5-5.3
Strength, MPa	---	*32-34*	*35-37*

Property values listed are typical for laminates with 50 to 55% fiber volume.

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Cytec ENGINEERED MATERIALS
CREATING A MATERIAL ADVANTAGE

Typical properties

E-Glass fiber reinforced 8 harness satin fabric

Typical Cytec Engineered Materials product codes: MXB 7701/1581; MXB 7701/7781

Mechanical properties	-65°F (-54°C)	RT	180°F (82°C)
0° Tensile properties			
Strength, ksi	64-67	59-61	48-51
Modulus, Msi	2.8-3.0	3.2-3.4	3.0-3.2
Strength, MPa	*441-462*	*407-421*	*331-352*
Modulus, GPa	*19-21*	*22-24*	*21-22*
0º Compressive properties			
Strength, ksi	67-70	64-69	46-50
Modulus, Msi	3.4-3.7	3.8-4.0	3.4-3.7
Strength, MPa	*462-483*	*441-476*	*317-345*
Modulus, GPa	*24-26*	*27-28*	*24-26*
Interlaminar shear properties			
Strength, ksi	---	9.7-10.1	5.7-5.9
Strength, MPa	---	*67-70*	*39-41*

Property values listed are typical for laminates with 50 to 55% fiber volume.

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Cytec ENGINEERED MATERIALS
CREATING A MATERIAL ADVANTAGE

Typical properties

Quartz fiber reinforced 8 harness satin fabric

Typical Cytec Engineered Materials product code: MXQ 77O1/581

Mechanical properties	**RT**
0° Tensile properties	
Strength, ksi	79-81
Modulus, Msi	3.6-3.8
Strength, MPa	*545-558*
Modulus, GPa	*25-26*
0º Compressive properties	
Strength, ksi	65-67
Modulus, Msi	3.5-3.7
Strength, MPa	*448-462*
Modulus, GPa	*24-26*
Interlaminar shear properties	
Strength, ksi	3.9-4.1
Strength, MPa	*27-28*

Property values listed are typical for laminates with 50 to 55% fiber volume.

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Cytec ENGINEERED MATERIALS
CREATING A MATERIAL ADVANTAGE

Product safety

Material Safety Data Sheets can be obtained from the Cytec Engineered Materials Safety, Health and Environmental Affairs Department in Winona, Minn. by calling (507) 454-3611.

Product handling

The wearing of clean, impervious gloves is recommended when working with prepreg materials. See Material Safety Data Sheet for more information.

Shipping

Prepreg is typically shipped as rolls in sealed aluminum or polyethylene bags in cardboard containers packed with dry ice.

Disposal of scrap material

Disposal of material should be in accordance with local, state, and federal regulations which may vary by location. Questions concerning disposal should be directed to the Cytec Engineered Materials Safety, Health, and Environmental Affairs Department in Winona, Minn. at (507) 454-3611 for evaluation on a case-by-case basis.

Warning

The data listed has been obtained from carefully controlled samples considered to be representative of the product described. Because the properties of this product can be significantly affected by the fabrication and testing techniques employed, and since Cytec Engineered Materials does not control the conditions under which its products are tested and used, Cytec Engineered Materials cannot guarantee that the properties listed will be obtained with other processes and equipment.

contact US

Cytec Engineered Materials Inc. North American Facilities

Anaheim, California
714 630-9400 • Fax 714 666-4345

Havre de Grace, Maryland
410 939-1910 • Fax 410 939-8100

Greenville, Texas
903 457-8500 • Fax 903 457-8598

Winona, Minnesota
507 454-3611 • Fax 507 452-8195

Orange, California
714 639-2050 • Fax 714 639-2033

D Aircraft Products, Inc.
Anaheim, California
714 632-8444 • Fax 714 632-7164

Cytec Carbon Fibers LLC
Piedmont, South Carolina
800 222-2448 • Fax 864 299-9333

GLOBAL HEADQUARTERS
Tempe, Arizona
480 730-2000 • Fax 480 730-2390

Cytec Engineered Materials, Ltd.
United Kingdom
Wrexham, UK
+44 1978 665200
Fax +44 1978 665222

Cytec Engineered Materials (GmbH)
Germany
Ostringen, Germany
+49 7523 912800
Fax +49 7523 912899

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