

CYCOM® 2282 Ballistic Kevlar® Panels/Prepreg

DESCRIPTION

CYCOM® 2282 ballistic prepreg and cured panels are designed for use in the manufacture of ballistic armor. This product offers excellent characteristics where maximum ballistic performance is required with minimal weight. These materials were tested and passed the compartment interiors requirements of FAR 25.853(d), Amendment 25-83, Appendix F, Parts I, IV and V, including the OSU heat release, vertical burn rate and NBS optical smoke density.

CYCOM 2282 modified phenolic resin is available in cured sheets and prepreg product forms. It can be manufactured with various reinforcements including aramid, glass and polyethylene fabrics.

FEATURES AND BENEFITS

- Available in cured sheets or prepreg forms – 4' x 8' cured sheets (can also be fabricated to custom specifications)
- No curing required with cured sheets, simply cut to fit the specific application
- Cured to custom thickness requirements and specified threat level
- Passes compartment interiors requirements of FAR 25.853(d)
- Excellent ballistic performance, in accordance with N.I.J. STD. 0101-4, (Ref. FAA AC No. 25.795-2) Level IIIA

SUGGESTED APPLICATIONS

- Commercial aircraft interiors – cockpit doors, bulkheads or other crew protection components
- Military rotorcraft

CHARACTERISTICS

Table 1 | CYCOM 2282 Characteristics

Properties	Value (Room Temperature, Dry)
Form	Cured Sheet or prepreg
Fabric	Aramid (14oz/yd ²)
Weave Style	Plain and basket 2x2
Dimensions	Sheets – Cured 4ft x 8ft or 4ft x (requested length) Prepreg – 38" wide or 50" wide

PROPERTIES

Table 1 | Mechanical Properties of CYCOM 2282

Property	Test Method	Test Condition	Value	
0° Tensile Properties	Strength (Ksi)	ASTM D638	Room Temp	73.2
	Modulus (Msi)	ASTM D638	Room Temp	1.2
0° Compressive Properties	Strength (Ksi)	ASTM D695	Room Temp	6.3
	Modulus (Msi)	ASTM D695	Room Temp	1.5
0° Flexural Properties	Strength (Ksi)	ASTM D790	Room Temp	8.6
	Modulus (Msi)	ASTM D790	Room Temp	0.5
Short Bean Shear Strength (Ksi)	--	Room Temp	0.9	

Table 2 | CYCOM 2282 Flammability

Property	Value	
Vertical Burn (60 seconds)	Burn Length (inches)	0.0
	Extinguishing time (seconds)	0.0
	Drip extinguishing time	0.0
NBS Optical Smoke Density, Flaming mode	D at 90 seconds	1.0
	D at 4 minutes	6.0
OSU Heat Release Rate	Total heat Release (Kw-min./m ²)	23.7
	Peak heat release (kw/m ²)	1.8

PRODUCT HANDLING AND SAFETY

Cytec Industries Inc. recommends wearing clean, impervious gloves when working with prepregs materials to reduce skin contact and to avoid contamination of the product. Materials Safety Data Sheets (MSDS) and product labels are available upon request and can be obtained from www.cytec.com or any Cytec location supplying aerospace materials.

DISPOSAL OF SCRAP MATERIAL

Disposal of scrap material must be in accordance with local, state, and federal regulations.

CONTACT INFORMATION

Global Product Referral

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