



HexPly[®] 250/250C/250CB

135°C curing phenolic matrices

Product Data

Description

HexPly 250 is a phenolic matrix widely used in honeycomb sandwich components for aircraft interior furnishings. The low smoke and low toxicity properties of 250 during ignition meet the requirements of FAR 25 and ATS 1000.

HexPly 250 prepreg is available in fabric reinforcements and single tows.

The following variants are also available:

HexPly 250C meets the requirements of the ground transportation fire specification NF F 16 -101.

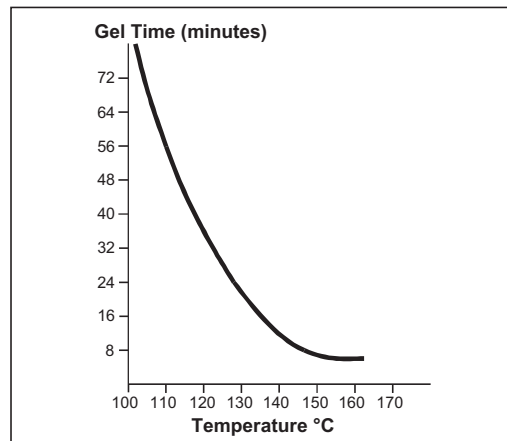
HexPly 250CB is as 250C with an improved surface finish.

Benefits and Features

- Qualified for aerospace and ground transport Fire, Smoke and Toxicity (FST) specifications
- Controlled flow matrix
- Excellent tack life
- Self extinguishing
- Good peel properties

Resin Matrix Properties

Gel Time



Prepreg Curing Conditions

HexPly 250 system can use two cure cycles, at a pressure between 0.3 to 3 bar.

| Temperature (°C) | Time |
|------------------|--------|
| 135 | 90 min |
| 150 | 30 min |

Heat up rate 1 - 3°C/min

Performance testing should accompany alternative cure cycles to ensure suitability for the particular application.



Fire Properties of 250 Matrix (OSU chamber heat release results)

Standard: FAR 25 Amendment 61

| Specimen Construction | Requirements | | Heat Release KW.min/m ² | Heat Release Rate KW/m ² |
|--|--------------|------------------------|---------------------------------------|--|
| | 1988 | 1990 | | |
| 2 plies VX 250/38%/7581 Nomex H/C A1 48 48 9mm 2 plies VX 250/38%/7581 | 100/100 | 65/65 | 55 | 41 |
| The above construction faced with the SCHNELLER LHR/HA211 DECORATIVE FILM | 100/100 | 65/65 | 47 | 38 |
| DEC. FILM LHR SCHNELLER 2 plies VX 250/47%/G874 Nomex H/C 4mm thick 2 plies VX 250/47%/G874 | 100/100 | 65/65 | 44 | 48 |
| DEC. FILM POLYPLASTEX S3000 4 plies VX 250/47%/G874 | 100/100 | 65/65 | 31 | 41 |
| Fire behaviour: 250 300 g/m ² (E glass prepreg) | | Pass Pass | | FAR 25853 apd F part I+III+IVOSU (100.100)+V ATS 1000.001 Issue V NF F 16-101 M ₁ F ₀ |
| Fire behaviour: 250C | | | | |
| Cured resin density | | 1.15 g/cm ³ | | |

Prepreg Storage Life

| | | |
|-------------------------|---------|-----------|
| ■ Tack life | @ 23°C | 60 days |
| ■ Guaranteed shelf life | @ -18°C | 12 months |

Precautions for Use

The usual precautions when handling uncured synthetic resins and fine fibrous materials should be observed, and a Safety Data Sheet is available for this product. The use of clean disposable inert gloves provides protection for the operator and avoids contamination of material and components.

Important

All information is believed to be accurate but is given without acceptance of liability. Users should make their own assessment of the suitability of any product for the purposes required. All sales are made subject to our standard terms of sale which include limitations on liability and other important terms.

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- Carbon Fibre
- RTM Materials
- Honeycomb Cores
- Continuous Fibre Reinforced Thermoplastics
- Carbon, glass, aramid and hybrid prepregs
- Reinforcement Fabrics
- Structural Film Adhesives
- Honeycomb Sandwich Panels
- Special Process Honeycombs

For US quotes, orders and product information call toll-free 1-800-688-7734

For other worldwide sales office telephone numbers and a full address list please go to:

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