



HexPly® HT93

135°C curing phenolic matrix



Product Data Sheet

Description

HexPly HT93 is a phenolic resin developed to meet such FST (Fire, Smoke, Toxicity) regulations for aircraft interior panels such as: side wall panels, floor panels, galleys, ceiling panels and toilets. HexPly HT93 has very good drape and tack properties.

HexPly HT93 prepreg is available in various fabric reinforcements.

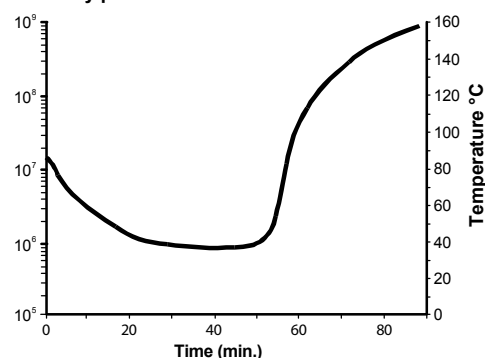
Benefits and Features

- Controlled flow matrix
- Excellent tack life
- Excellent drape properties
- Self extinguishing FAR 25.853
- FAR 25.853 Amendment 66 and OSU 65/65
- Good peel properties
- Versatile cure cycle 125 - 150°C
- Suitable for vacuum bag, press and autoclave

Resin Matrix Properties

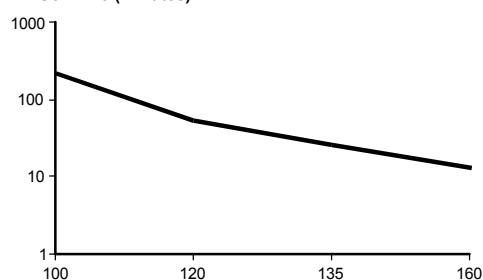
Rheology

Viscosity/poise



Gel Time

Gel Time (minutes)



Prepreg Curing Conditions

Temperature (°C)

125

135

150

Time

2 hours

1 hour 30 mins

1 hour

Heat up rate 0.5 - 10°C/min



Cured Matrix Properties

Smoke* and Toxicity**

Monolithic 6 plies - 1.9 ± 0.1mm - 40% Resin in weight

	Density	Toxicity (concentration in ppm at 4 minutes)						
	DS/4 min	HF	HCL	HCN	SO ²	CO	NO+NO ²	HBr
FAA requirements	<200	<100	<150	<150	<100	<3500	<100	-
With Flame (3 specimens)	55	9.22	38.09	0	0	10	0	-
	102	4.49	62.05	0	0	12	0	-
	46	1.81	32.81	0	0	11	0	-
Average	67	5.17	44.31	0	0	11	0	-
Without Flame (3 specimens)	42	7.5	35.9	0	0	10	0	1.43
	29	5.31	32.4	0	0	10	0	-
	69	2.39	7.3	0	0	10	0	-
Average	47	5.1	25.2	0	0	10	0	0.5
Comment	Pass	Pass	Pass	Pass	Pass	Pass	Pass	-

Test Methods: *FAR/JA2 25.853 - Appendix F - Part V

**ATS 1000.001 - Issue 5

Prepreg Storage Life

- Tack Life @ 23°C 30 days
- Guaranteed Shelf Life @ -18°C 14 months (maximum, from date of manufacture)

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.

For more information

Hexcel is a leading worldwide supplier of composite materials to aerospace and industrial markets. Our comprehensive range includes:

- HexTow® carbon fibers
- HexFlow® RTM resins
- Engineered core
- HexForce® reinforcements
- HexBond™ adhesives
- Engineered products
- HiMax® multiaxial reinforcements
- HexTool® tooling materials
- Polyspeed® laminates & pultruded profiles
- HexPly® prepregs
- HexWeb® honeycombs
- HexAM® additive manufacturing
- HexMC®-i molding compounds
- Acousti-Cap® sound attenuating honeycomb

For U.S. 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:

<https://www.hexcel.com/contact>

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