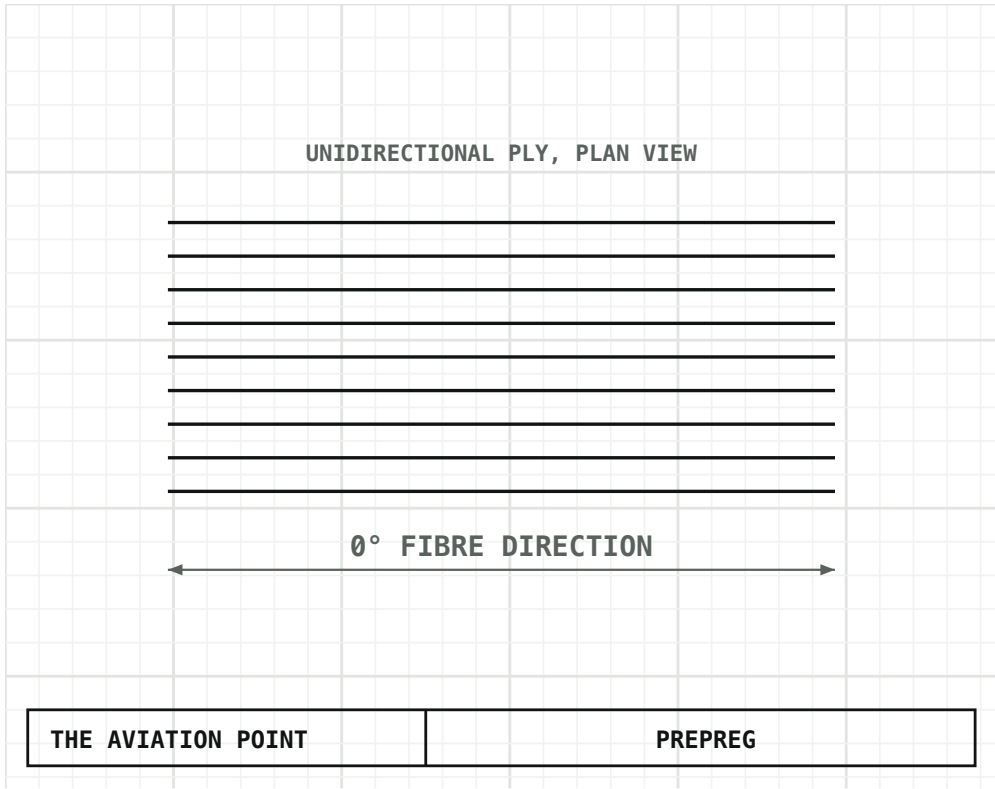
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Prepreg — fibre pre-impregnated with resin

Prepreg is fiber already impregnated with a mixed, part-cured (B-stage) resin.



Schematic

Designation

Item	Value
Designation	Prepreg
Class	Composites
Type	fibre pre-impregnated with resin

Storage life, HexPly 8552

Item	Value
Tack life	10 days at 73 °F (23 °C)
Out life	30 days at 73 °F (23 °C)
Shelf life	12 months at 0 °F (-18 °C), maximum, from manufacture
Resin content, tapes / fabrics	33–38% / 32–42%

Hexcel sheet (2020). Out life is the accumulated time at room temperature between removal from the freezer and cure.

Autoclave cure procedure, HexPly 8552

Step	Instruction
1	Full vacuum and 15 psig
2	Heat at 3–5 °F/min to 225 °F
3	Hold at 225 °F for 30–60 min
4	Raise pressure to 85–100 psig; vent vacuum at 30 psig
5	Heat to 350 °F and hold 120 ± 10 min
6	Cool at 2–5 °F/min to 150 °F and vent

Hexcel lists alternative cure cycles on request. A repair uses the cycle in the SRM or material specification, usually with a heat blanket and bag rather than an autoclave.

Notes

- **One system's numbers.**
- **Log the clock.** Out time is accumulated, not reset by a return to the freezer.

SOURCES · Hexcel HexPly 8552 Product Data Sheet · FAA-H-8083-31B, AMT Handbook — Airframe, Volume 1, Chapter 7

SCAN · OPEN THIS DATA SHEET
theaviationpoint.com/parts/materials/prepreg/

Reference data. The aircraft manufacturer's documentation (SRM / IPC) takes precedence.