DuPont™ Kevlar® Prepreg 258HPA

Protection against a range of threats

DuPont™ Kevlar® Prepreg 258HPA will provide protection against non-deformable projectiles (fragments), deformable projectiles (bullets) and blunt impacts. This material, comprised of high-tenacity DuPont™ Kevlar® K129 fibres and a phenolic based resin, will provide protection in the toughest environments. It is particularly suited for helmets, vehicle armour and ceramic backing applications.

Processing

DuPont™ Kevlar® Prepreg 258HPA is characterized by a fast curing proprietary PVB modified phenolic resin allowing to increase productivity and comes in the form of a pre-impregnated rolled-good in a width of 1m30. Recommended curing conditions are temperatures between 160°C and 170°C, and pressures between 10 and 100 bar for optimal performances. Typical curing times are 15 minutes and parts do not require cooling before de-moulding.

Typical properties

DuPont™ Kevlar® Prepreg 258HPA is particularly suited for ballistic helmet applications and is a material of choice for the manufacturing of demanding PASGT, ACH or MICH type helmets requiring high levels of resistance to fragments, hand-gun bullets, blunt impacts, repeated side-to-side compression, low and high temperature performance, and a high durability.
Kevlar® Prepreg 258HPA is also suited for vehicle armouring as a metal or ceramic backing material providing efficient support and fragment retention capabilities and increasing overall protection levels. Kevlar® Prepreg 258HPA is suited for use as an internal vehicle liner withstanding the environmental constraints, as well as the temperature extremes it can be exposed to in this application. It has also inherent fire-resistant characteristics allowing it to pass NAVSEA requirements for use in constraint areas on ships.

DuPont™ Kevlar® Prepreg 258HPA				
Yarn type	Resin type	Prepreg width	Thickness	Areal weight 30°/165°C
K129	PVB-phenolic	130cm	0.4mm/ply	450 g/m²/ply

Storage

DuPont™ Kevlar® Prepreg 258HPA must be stored protected from light, dust, water or other contaminants before processing. Its shelf-life at room temperature is 6 weeks, and 3 months in refrigerated conditions.

L-14578