

Basaltex presents fire resistant prepreg at JEC World 2018

A non-combustible basalt fabric impregnated with non-halogenated 100% bio-based thermoset resin with excellent fire, smoke and toxicity performance.

This prepreg material has been developed for industrial, construction and transport applications. It offers high mechanical properties in combination with excellent fire behaviour.

The curing can be performed by press, vacuum and autoclave moulding.

Basalt fibers are extruded from 100% basalt volcanic rocks. High quality fibers are selected for the production of Basaltex' fabrics. Basalt fibers production emits less carbon dioxide and has a positive ecological profile supported by an LCA study. They are characterized by outstanding mechanical properties combined with good heat and chemical resistance.

PFA finds its origins in the conversion of hemicellulose to furfural which in turn is isolated from sugar cane residues after refinery. This renewable alcohol is subsequently polymerized to polyfurfuryl alcohol (PFA) which is a VOC-free thermoset resin systems. PFA finds application in composites for construction industry and public transport as fire resistant material and is a natural alternative for phenolic resins.

Basalt fibers are inert at high temperatures, will not soften like glass fibers, and retain their structure in a fire. Impregnation with PFA results in a prepreg that combines fire performance, mechanical strength and high productivity.

- **non-combustible and high fire integrity**
- **low smoke and toxicity**
- **high mechanical properties for structural reinforcement**
- **easy to use, long shelf -life and high productivity**
- **VOC free, 100% ecological**

