

# P109 HIGH PERFORMANCE R-GLASS

MULTI-END ROVING FOR AERONAUTIC APPLICATIONS



## DESCRIPTION – R-Glass basic stands

- **P109** multi-end rovings are made from R-Glass basic strands (or ends), assembled with no intentional twist. R-Glass provide high mechanical properties.
- P109 Rovings are coated with a silane based sizing which makes it compatible with most commonly used thermoset resins, typically epoxy ones.
- P109 Rovings are intended for production of aeronautic composite structures, with exceptional static and fatigue strengths, and high modulus strengths.

## BENEFITS

- Boron and fluorine free glass
- High modulus
- High fatigue resistance
- Excellent mechanical and thermal properties
- Easy unwinding
- Very good wet-out and impregnation
- High strand integrity



## APPLICATIONS

P109 Rovings can be used in a large variety of textile processes:

- Filament winding (dry and wet process)
- Unidirectional pre-pregging (dry and wet process)
- Pultrusion
- Weaving (woven or knitted fabrics)



# P109 HIGH PERFORMANCE R-GLASS

## MULTI-END ROVING FOR AERONAUTIC APPLICATIONS

### TECHNICAL CHARACTERISTICS (NOMINAL VALUES)

Product	Filament $\phi$ ( $\mu\text{m}$ )	Linear weight of roving (Tex) ISO 1889	Loss on Ignition (%) ISO 1887	Moisture content (%) ISO 3344
P109 10R 800	10	800	0.48	$\leq 0.10$
P109 14R 800	14	800	0.48	$\leq 0.10$
P109 14R 1600	14	1600	0.48	$\leq 0.10$

### PACKAGING

Roving are supplied on cardboard tubes for external unwinding. Each bobbin is protected by a polyethylene bag and placed with a centring device in a cardboard box. The pallets are wrapped by a stretched film. Packaging system is not designed for stacking.

Product	Roving $\phi$ (mm)		Height (mm)	Net weight (kg)	Layers per pallet	Bobbins per layer	Bobbins per pallet	Pallet dimensions L x W x H (cm)
	Internal	External						
P109 10R 800	76	158	270	6.80	3	12	36	120 x 100 x 103
P109 14R 800	76	220	270	5 – 14	3	20	60	120 x 100 x 103
P109 14R 1600	76	220	270	14	3	30	90	120 x 100 x 103

### LABELING

Each bobbin has a self-adhesive identification label, showing the product reference and the production date.

### STORAGE

Unless otherwise specified, it's recommended to store P109 Roving in their original packaging in a cool dry area. Optimal conditions are temperatures between 15°C and 35°C and humidity between 35% and 65%. If the product is stored at low temperature (below 15°C), it is advisable to condition it in the workshop for at least 24 hours before use, to prevent condensation.

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