

# Technical Data Sheet

## Direct Roving 469L

Roving for Filament Winding, Pultrusion and Weaving

### Product Description

The Direct Roving 469L is formed by winding glass filaments without twist onto cylindrical bobbins. The 469L sizing has a silane based coupling agent, which is compatible with polyesters, vinyl esters and epoxy resins.

### Product Application

The Direct Roving 469L is designed for filament winding, pultrusion and weaving.



### Product Benefits

- Constant tension;
- Uniform yield;
- Fast wet-through;
- Good mechanical and fatigue properties.

### Identification

<b>Example:</b>	<b>ECT469L-740</b>
<b>ECT:</b>	CPIC description of the type of glass, E-glass boron free
<b>469L:</b>	CPIC BRAZIL sizing reference
<b>740:</b>	Linear nominal weight of direct roving (tex)



## Technical Characteristics

Linear weight (tex)*	Loss on ignition (%)	Moisture (%)	Tensile strength (N/TEX)
<b>ISO 1889</b>	<b>ISO 1887</b>	<b>ISO 3344</b>	<b>ISO3341</b>
300 ± 15	0.45 ± 0.10	≤ 0.10	≥ 0.35
408 ± 20	0.45 ± 0.10	≤ 0.10	≥ 0.35
600 ± 30	0.45 ± 0.10	≤ 0.10	≥ 0.35
660 ± 60	0.45 ± 0.10	≤ 0.05	≥ 0.35
740 ± 37	0.45 ± 0.10	≤ 0.10	≥ 0.35
1100 ± 55	0.45 ± 0.10	≤ 0.10	≥ 0.35
1200 ± 60	0.45 ± 0.10	≤ 0.10	≥ 0.30
2200 ± 110	0.45 ± 0.10	≤ 0.10	≥ 0.30
2400 ± 120	0.45 ± 0.10	≤ 0.10	≥ 0.30
4400 ± 220	0.45 ± 0.10	≤ 0.10	≥ 0.30
4800 ± 240	0.45 ± 0.10	≤ 0.10	≥ 0.30
8800 ± 440	0.45 ± 0.10	≤ 0.10	≥ 0.30
9600 ± 480	0.45 ± 0.10	≤ 0.10	≥ 0.30

\*Others tex on consultation

## Roving Characteristics

Linear weight (tex)	Diameter (mm)		Nominal height (mm)	Nominal weight (kg)
	Internal	External		
300	165	300	160	12
Others	165	300	270	14 – 17*

\*Can contain 4 bobbins between 8kg to 14 kg per pallet level

## Packaging

Each Direct Roving 469L is protected by a stretch or adhesive film, that should not be removed until it is completely used. The rovings are packed in Octahedra packaging put over a wood pallet. The packaging unit is the pallet.

Packaging	Level	Pallet dimensions L x W x H (mm)	Net weight (kg)
Octahedra	3	1140 x 1140 x 950	816
Octahedra	4	1140 x 1140 x 1220	1088
Octahedra (200 tex)	8	1140 x 1140 x 1220	1088

\*In case of specific requirements, please, contact us.

## Storage

The Direct Roving 469L should be stored away from heat and moisture, and in their original packaging. The best conditions are: temperatures between 15 and 35 °C; humidity between 35 and 65 %.

If the product is not stored under these specifications, it is advisable to condition it in the workshop for at least 24 hours before the use, to prevent condensation.

Pallets can be stored in 2 levels (1+1) using a protection between them (cardboard or wood panel).

CPIC Brazil recommends material consumption according to FIFO method (first in, first out).



**Integrated Management System Certifications:**

**ISO9001**

**ISO14001**

**ISO45001**