



## Triton TRIMOL 50 REINFORCEMENT RODS

### Description

Our Glass Rods are manufactured by the process known as Pultrusion, which is an automated open-end method for the production of Continuous Glassfibre Plastic structural profiles such as Rods, Tubes, I-Beams, Cruciforms, Rectangles etc.

The principal advantages achieved by Pultrusion are:

- High glass contents up to 80% by weight
- Precise positioning of the continuous glassfibres parallel to the rods axis
- Ability to vary the tension of the parallel glassfibres
- Continuous lengths of rod can be reproduced
- The use of specifically developed resin systems to ensure excellent wetting out and internal bonding of the glassfibres

The combination of these key features results in a product with a unique range of properties, eg:

- Outstanding tensile strength comparable with high tensile steel
- Lightness in weight (high tensile steel is four times heavier)
- High voltage withstands greater than 100kV per inch
- Excellent resistance to many hundreds of corrosive media
- Good thermal properties
- The exceptional mechanical strength of the rod permits the crimping of metal end fittings at high pressure giving high pull-off loads.

### Physical Properties

Diameter	Any diameter available up to 1¼"
Length	Stock lengths available up to 21ft
	Longer lengths can be pulled as requested
Specific Gravity	2.10 – 2.16
Dia: Tolerance	Rod as pultruded ± 0.010"
	Rod as ground ± 0.002"

### Mechanical Properties

Tensile Strength (Ultimate)	190 – 220 x 10 <sup>3</sup>	lbf/in <sup>2</sup>
Flexural Strength (ASTM D349-56)	170 – 200 x 10 <sup>3</sup>	lbf/in <sup>2</sup>
Compressive Strength (ASTM D349-56)	98 – 105 x 10 <sup>3</sup>	lbf/in <sup>2</sup>
Modules of Elasticity		
In Tension	7.2 x 7.35 x 10 <sup>6</sup>	lbf/in <sup>2</sup>
In Bending	5.3 x 5.5 x 10 <sup>6</sup>	lbf/in <sup>2</sup>
In Compression	2.6 x 3.3 x 10 <sup>6</sup>	lbf/in <sup>2</sup>
Impact Strength		
Notched (BS2782 method 306A)		lbf
Unnotched BBS2782 method 306A)		lbf



## Electrical Properties

Electrical Strength	Greater than 100kV/in
Axial (BS2782 Method 201F)	

## Thermal Properties

Temp of Deflection (BS3534:Part 2 App A)	220°C
Under load of 360 Kg/cm <sup>2</sup> Class F Temperature Classification (BS2757)	

## Chemical Properties

Water Absorption (BS2782 Method 502F)	Less than 1mg
Resistance to Weak Alkalies	Excellent
Resistance to Strong Alkalies	Attack will occur
Resistance to Weak Acids	Excellent
Resistance to Strong Acids	Generally Good
Resistance to Organic Solvents	Excellent

## Caution

**Triton TRIMOL 50** Reinforcement Rods are generally harmless providing that the normal common-sense precautions taken when handling chemicals are observed. For instance neither the separate components nor the uncured mixture should be allowed to come into contact with foodstuffs or utensils. Measures should also be taken to prevent contact with the skin: wearing rubber or plastic gloves will normally suffice along with eye protection. Thoroughly cleanse the skin at the end of each working period by washing with soap and water. Disposable paper towels are recommended to dry the skin. Precautions are fully discussed in Product Safety Information sheet for **Triton TRIMOL 50** Reinforcement which is available on request.

## Health & Safety

For full information consult the relevant Material Safety Data Sheet.

For further information please contact:

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