



## EARTH FIBER PolyTuff

**PREMIUM VIRGIN POLY FIBER**

For Concrete Reinforcement & Crack Control



Controls Plastic  
Shrinkage Cracks



Improves Impact &  
Abrasion Resistance



Enhances Durability  
& Toughness



Non-Corrosive &  
Alkali Resistant



Easy to Use &  
Cost Effective

### DESCRIPTION

Earth Fiber PolyTuff is a premium quality virgin poly fiber specifically designed for concrete reinforcement and crack control. Manufactured from 100% virgin poly fiber, its unique monofilament structure ensures excellent bonding with cement matrix, improving durability, impact resistance and post-cracking performance of concrete.

### APPLICATIONS

- Industrial flooring & warehouse floors
- Pavements & rigid road surfaces
- Shotcrete & precast concrete
- Plastering & rendering
- Water tanks, canals & tunnels
- Concrete repair & rehabilitation
- Crack control in all concrete structures

### KEY BENEFITS

- ✓ Controls plastic shrinkage and settlement cracks
- ✓ Improves impact, abrasion and shatter resistance
- ✓ Enhances ductility and post-cracking behavior
- ✓ Provides three dimensional reinforcement
- ✓ Reduces permeability and improves durability
- ✓ Alkali resistant, non-corrosive and non-magnetic
- ✓ Easy mixing and uniform dispersion
- ✓ Cost effective solution for long lasting concrete

### PACKAGING OPTIONS



### TECHNICAL DATA

| PROPERTIES                   | TEST METHOD        | UNIT  | TYPICAL VALUE        |
|------------------------------|--------------------|-------|----------------------|
| Material                     | -                  | -     | Virgin Poly Fiber    |
| Fiber Type                   | -                  | -     | Monofilament         |
| Appearance                   | Visual             | -     | White                |
| Specific Gravity             | ASTM D792          | -     | 1.34 - 1.38          |
| Length (Available)           | -                  | mm    | 6 mm, 12 mm          |
| Diameter (Equivalent)        | ASTM D3822 / D1777 | µm    | 18 - 30              |
| Tensile Strength             | ASTM D3822         | MPa   | 400 - 600            |
| Elastic Modulus              | ASTM D3822         | GPa   | 8 - 12               |
| Elongation at Break          | ASTM D3822         | %     | 10 - 25              |
| Melting Point                | ASTM D3418         | °C    | 250 - 260            |
| Moisture Absorption          | ASTM D570          | %     | < 0.4                |
| Acid & Alkali Resistance     | ASTM D543          | -     | Excellent            |
| Electrical Conductivity      | ASTM D257          | -     | Low (Non Conductive) |
| Resistance to UV & Chemicals | -                  | -     | Excellent            |
| Dosage                       | -                  | kg/m³ | 0.6 - 1.5            |

### STANDARDS COMPLIANCE

|                                                                              |                                                  |                                                                                       |                                                                              |                                                                                 |                                                   |
|------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|
| <br>ASTM C1116<br>Standard Specification<br>for Fiber Reinforced<br>Concrete | <br>EN 14889-2<br>Polymer Fibres<br>for Concrete | <br>ASTM D3822<br>Standard Test Method<br>for Tensile Properties<br>of Textile Fibres | <br>ASTM D792<br>Standard Test Method<br>for Density and Specific<br>Gravity | <br>ASTM D3418<br>Standard Test Method<br>for Transition Temperatures<br>by DSC | <br>ISO 9001:2015<br>Quality Management<br>System |
|------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|

### AVAILABLE SIZES



6 mm



12 mm

### DOSAGE GUIDELINE

Recommended dosage  
0.6 - 1.5 kg per m³  
of concrete.



#### STORAGE

Store in a dry place. Keep away from direct sunlight and moisture. No shelf life when stored as per recommended conditions.



#### SAFETY PRECAUTIONS

Non-hazardous material. Use normal PPE (gloves, mask, goggles) while handling. Wash hands after use.



#### DISCLAIMER

The information provided is based on our current knowledge and experience. Users are advised to conduct their own trials to suit specific site conditions.



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