

Sinofibra Advanced Materials Co.,Ltd.

**Product:** Water-Swellable Polyester Filler Yarn (Gel-Free Buffer Tube Filler)  
**Product Series:** SF-WBP-Series  
**Product IDs:** SF-WBP200H / SF-WBP300H / SF-WBP600H / SF-WBP800H



## PRODUCT DESCRIPTION

The **SF-WBP-Series** is a polyester-based filler yarn coated with a superabsorbent polymer (SAP). When exposed to water, the SAP swells to help reduce longitudinal water migration in gel-free buffer tube optical fiber cable designs.

## APPLICATIONS

- Loose tube / buffer tube optical fiber cables
- Dry (gel-free) water-blocking cable constructions
- Filler inside buffer tubes

## KEY FEATURES

- Rapid swelling behavior in contact with water.
- Low hot shrinkage to support dimensional stability during cable processing.
- Low lint/dust tendency.
- Soft handling to support co-routing with fibers in buffer tubes.
- Good handling stability under typical factory humidity .

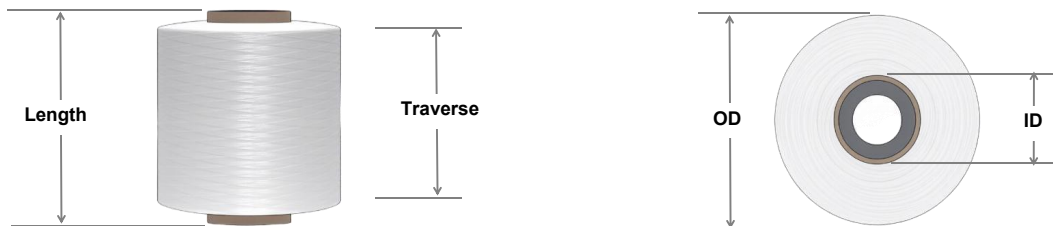
## PHYSICAL & MECHANICAL PROPERTIES

Standard laboratory conditions (unless otherwise stated): 23 ± 2 °C, 50 ± 10 % RH.

Property	Unit	Test Standard	SF-WBP200H	SF-WBP300H	SF-WBP600H	SF-WBP800H
Linear Density (Nominal)	Denier	ASTM D1907	200	300	600	800
Linear Density Range	Denier	ASTM D1907	185 - 230	270-360	550-650	735-865
Break Strength (Nominal)	N	ASTM D2256	8.0	9.5	15.5	35.0
Break Strength (Min.)	N	ASTM D2256	6.0	6.5	12.0	30.0
Elongation at Break (Nom.)	%	ASTM D2256	15.0	15.0	15.0	18.0
Elongation at Break (Min.)	%	ASTM D2256	10.0	10.0	10.0	12.0
Hot Shrinkage (177°C, 2min)	%	ASTM D2259	4.5-6.0	4.5-6.0	3.5-5.0	3.5-5.0
Absorption Speed (Min.)	g/g/min	SF22-12-08a	60.0	60.0	60.0	60.0
Absorption Capacity (Nom.)	g/g	SF22-12-08a	75.0	85.0	85.0	85.0

(Note: Absorption testing conducted via standard gravimetric method using deionized water at 20°C).

## PACKAGING



Tube Specs	ID	Length	Traverse	Max. OD	Surface Finish
SF94x216	94mm	216mm	185mm	270mm	rough
SF94x290	94mm	290mm	250mm	270mm	rough

## STORAGE & HANDLING

**Storage:** Keep in original sealed packaging in a clean, dry, and well-ventilated area.

**Conditions:** Temperature ≤ 30 °C, Relative Humidity (RH) ≤ 65%.

**Compliance:** RoHS and REACH compliant; free of hazardous substances.

## DISCLAIMER

The information in this TDS is based on laboratory measurements and is provided for product selection and specification development. Actual performance may vary with cable design, processing conditions, and environmental factors. Users are responsible for determining suitability for the intended application.

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