

POLYESTER

The most common polyester for fiber purposes is poly (ethylene terephthalate), or simply PET. This is also the polymer used for many soft drink bottles and it is becoming increasingly common to recycle them after use by remelting the PET and extruding it as fiber. This saves valuable petroleum raw materials, reduces energy consumption, and eliminates solid waste sent to landfills.

PET is made by reacting ethylene glycol with either terephthalic acid or its methyl ester in the presence of an antimony catalyst. The reaction is carried out at high temperature and vacuum to achieve the high molecular weights need to form useful fibers. PET is melt spun.

Polyester Fiber Characteristics

- Strong
- Resistant to stretching and shrinking
- Resistant to most chemicals
- Quick drying
- Crisp and resilient when wet or dry
- Wrinkle resistant
- Mildew resistant
- Abrasion resistant
- Retains heat-set pleats and crease
- Easily washed

Description	Denier	Cut Length (mm)	Luster	Packing Unit (Kg)	Remarks
Spinning	1.2,1.4,1.5	32-35-51	SD-BR	300	Flame Retardant
	1.4,2.5	38-51	SD	200	Co-PET/PET
	1.4, 2,0, 3,0, 7.0, 12.0,	38-51-64	SD	250	Heavy Metal Free
	1.5, 2,0, 3,0	38-51	SD-OB-DDB	300	Quick Absorbing & Fast Dreying
	1.4, 2,0, 2,8	38-51	SD	300	Anti-piling
	2.0, 2,5, 3,0	28-44- 51	SD	300	Acrylic like
	2.0, 2.5, 3.0	38-44-51	SD	300	Cationic Dyeable
	1,2	38-44	SD	300	High Tenacity
	0.5, 0,8, 1.0	32-38-44-51	SD	300	Micro Denier
Nonwoven	2.0, 4.0	38-51	SD	300	Thermal Bonding
	2.0, 4.0, 6.0, 15.0	38, 44, 51, 64	SD	300	Low Melt
	7.0	51-64	SD	300	Sound Absorbing
	1.4, 2.0, 3.0	38-51-64	SD-DDB	300	High Shrinkage (60%)
	0.7, 0.9, 1.2, 1.4, 2.0,	38-51-64	SD	300	Anti-microbial
	1.2,1.4,1.5.....12.0	38-64-120	SD	300	Dope Dyed

Some Major Polyester Fiber Uses

Apparel: Every form of clothing

Home Furnishings: Carpets, curtains, draperies, sheets and pillow cases, wall coverings, and upholstery

Other Uses: hoses, power belting, ropes and nets, thread, tire cord, auto upholstery, sails, floppy disk liners, and fiberfill for various products including pillows and furniture

General Polyester Fiber Care Tips

- Most items made from polyester can be machine washed and dried. Use warm water and add a fabric softener to the final rinse cycle. Machine dry at a low temperature and remove articles as soon as the tumbling cycle is completed.
- If ironing is desired, use a moderately warm iron.
- Most items made from polyester can be dry-cleaned