

POLYPROPYLENE POINTS OF INTEREST

Polypropylene is obtained from propylene gas, a byproduct of oil refining. It is resistant to commonly encountered soil chemicals, mildew, and insects and is non-biodegradable.

The wide pH range of polypropylene, 3-13, provides a much higher resistance to varying types of *CHEMICAL EXPOSURE. While acids affect the physical stability of polyester, they have little effect on polypropylene.

Another physical attribute of polypropylene is its specific gravity (density). The specific gravity of water is 1.0 making polypropylene (.90) the only fiber listed below that is lighter than water.

TABLE OF COMPARATIVE SPECIFIC GRAVITIES (DENSITY)

FIBER	SPECIFIC GRAVITY	COVERING POWER IN POUNDS
Polypropylene	0.90	1.00
Nylon	1.14	1.27
Acrylics	1.17	1.30
Silk	1.25	1.39
Wool	1.32	1.47
Acetate	1.33	1.48
Polyester	1.38	1.53
PVC	1.40	1.56
Rayon	1.53	1.70
Cotton	1.54	1.71

Example: It would take 1.53 pounds of polyester to cover the same volume as one pound of polypropylene.

As a result, polypropylene fabrics are much thicker per unit volume and provide better cushioning to protect against both puncture and abrasion.

Ultraviolet inhibitors are incorporated in the manufacturing process of polypropylene fabrics. The material is therefore scarcely affected when exposed to sunlight under normal environmental conditions.