# Polypropylene SR Product Overview

**Wide Selection of Configurations**

**High Grade Natural or Black**

**Featuring Spears® Special Reinforced (SR) Thread**

**Full 150 psi Pressure Rating at 73°F**

**180°F Maximum Service Temperature**

## • Patented Special Reinforced (SR) Thread Design

Spears® patented Special Reinforced (SR) thread design is one of the most significant advancements in the use of plastic threaded fittings. More than just an added metal ring, this unique precompression design compensates for expansion forces generated from tapered pipe thread joint make-up. Radial stress is reduced in normal installations and contained in severe over tightening situations. SR style fittings use type 316 Stainless Steel reinforcement.

## • Full 150 psi Pressure Rating For Threaded Systems Using SR Threaded Fittings

Spears® SR threaded Schedule 80 Polypropylene fittings provide the reinforcement necessary to provide threaded systems with full 150 psi pressure rating for water @ 73°F, typically found only in fusion welded systems.

## • High Grade Homopolymer Compound - Excellent Chemical Resistance

Spears® selection of a premium polypropylene homopolymer provides improved purity with excellent chemical resistance to many solvents, caustic solutions and mixed chemicals for a wide variety of applications. Available in natural or black materials.

## • Wide Range of Threaded Configurations - IPS Sizes 1/2" Through 2"

Spears® offers a wide assortment of Schedule 80 SR threaded Polypropylene fittings, including:

| | | |
|---|---|---|
| **90° Elbows** | **Couplings** | **Flanges** |
| **45° Elbows** | **Caps** | **Blind Flanges** |
| **Tees** | **Bushings** | **Unions w/EPDM or FKM Seals** |

## • Supplemental Line of Polypropylene Valves Available

Spears® also offers a broad line of Polypropylene, Diaphragm Valves and Butterfly Valves.

## Spears® Patented SR Technology
## Boosts Threaded Polypropylene Fitting Performance

### Improved Pressure Handling Performance

Due to the highly ductile nature of Polypropylene, most threaded PP fittings are rated for system pressures of 25 psi @ 73°F. Pressure applications of up to 150 psi generally require more costly fusion weld jointing methods or use of a glass-filled material which limits chemical resistance for some applications. Spears® Special Reinforced (SR) thread design boosts threaded PP fitting performance by containment of expansion forces generated both during threaded joint make-up and higher system pressure operation. Laboratory test assemblies of Spears® Schedule 80 SR Polypropylene threaded fittings have been subjected to ASTM D 1598 sustained pressure test for 1000 hours at 320 psi without failure or loss of joint integrity.

### Sound PP Threaded Connections

Spears® recommends use of Spears® **BLUE 75™** Thread Sealant for all SR threaded PP system connections to ensure chemical compatibility and joint integrity. Tape-type thread sealant can cause unwanted wedging action between threads. Choice of an appropriate thread sealant is at the discretion and responsibility of the installer. Spears® Schedule 80 SR Polypropylene fittings are assembled with an adhesive to position the reinforcing ring. If ring is loose, simply check that it is seated against the face of the fitting when assembling joint. A loose or spinning ring does not reduce its function upon installation. 1 to 2 turns beyond finger tight are generally sufficient to make a sound joint. Unnecessary over tightening can result in stripping of threads or other pipe and fitting damage.








Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product offerings