

# FLEXO® POLY-PRO PREMIUM POLYMER CONSTRUCTION ULTRA FLEXIBLE • BASE AND ACID RESISTANT

Flexo® Poly-Pro (PPN) was developed for applications where high flexibility and specific chemical properties are a must. Made from Polypropylene, Flexo® Poly-Pro is a highly specialized polymer option for your next project. It will not break as a result of continual movement and will maintain its shape after many cycles of bending and flexing which makes it an ideal solution for many applications. Not only that, Flexo® Poly-Pro is also boasts resistance to a wide range of bases, acids, and moisture absorption. The lightweight polymer itself also has outstanding resistance to electrical current. For these reasons, Flexo® Poly-Pro is often used in water treatment applications and where direct exposure to a wide range of other environmental conditions are found. This sleeving is a cinch to install over long runs due to its high expansion and ultra-flexibility and cuts best with a hot knife.

### **SIZING CHART**

| Nominal                         | Part #    | Min                            | Max       | *Put-Ups |        | Available | Lbs/ |
|---------------------------------|-----------|--------------------------------|-----------|----------|--------|-----------|------|
| Size                            | Part #    | Expansion                      | Expansion | M        | L      | Colors    | 100' |
| 1/8"                            | PPN0.13BK | <sup>3</sup> / <sub>32</sub> " | 1/4"      | 225'     | 1,000' | 1         | 0.10 |
| 1/4"                            | PPN0.25BK | 1/8"                           | 3/8"      | 200'     | 1,000' | 1         | 0.16 |
| 3/8"                            | PPN0.38BK | <sup>3</sup> / <sub>16</sub> " | 1/2"      | 125'     | 500'   | 1         | 0.33 |
| 1/2"                            | PPN0.50BK | 1/4"                           | 3/4"      | 100'     | 500'   | 1         | 0.45 |
| 3/4"                            | PPN0.75BK | 1/2"                           | 1¼"       | 75'      | 250'   | 1         | 0.66 |
| 1"                              | PPN1.00BK | 5/8"                           | 15⁄8"     | 65'      | 250′   | 1         | 0.74 |
| 1¼"                             | PPN1.25BK | 3/4"                           | 1¾"       | 50'      | 250′   | 1         | 0.88 |
| 1½"                             | PPN1.50BK | 1"                             | 21/8"     | 40'      | 200'   | 1         | 1.30 |
| 1 <sup>3</sup> ⁄ <sub>4</sub> " | PPN1.75BK | 1¼"                            | 2¾"       | 30'      | 200'   | 1         | 1.59 |
| 3"                              | PPN3.00BK | 2½"                            | 51/8"     | 50'      | 100'   | 1         | 2.32 |
| 3 END CONSTRU                   | CTION     |                                |           |          |        |           |      |
| 2"                              | PP32.00BK | 1½"                            | 3½"       | 50'      | 200'   | 1         | 1.45 |

\*Put-Ups: "M" = Shop Spool and "L" = Bulk Spool



#### **FEATURES**

| Material              | Polypropylene |
|-----------------------|---------------|
| Grade                 | PPN           |
| Monofilament Diameter | .010"         |
| Drawing Number        | TF001PPN-WD   |
| Cutting               | Hot Knife     |

#### COLORS



Black (BK)

#### **CERTIFICATIONS**





# ADVANCED ENGINEERING Technical Data Sheet



#### **ABRASION**

| Abrasion Resistance                        | LOW             |
|--|-----------------|
| Abrasion Test Machine                      | Taber 5150      |
| Abrasion Test Wheel                        | Calibrase H-18  |
| Abrasion Test Load                         | 500g            |
| Room Temperature                           | 71°F            |
| Humidity                                   | 54%             |
| Multiple Broken Filaments                  | 100 Test Cycles |
| Holes Forming                              | 250 Test Cycles |
| Material Destroyed                         | 400 Test Cycles |
| Pre-Test Weight                            | 5,988 mg        |
| Post-Test Weight                           | 5,828 mg        |
| Test End Loss Of Mass Point Of Destruction | 160.5 mg        |

## **PHYSICAL PROPERTIES**

| Monofilament Diameter (ASTM D-204)         | .010"     |
|--|-----------|
| Flammability Rating (FMVSS-302 Approved)   | UL94      |
| Recommended Cutting                        | Hot Knife |
| Colors                                     | 1         |
| Wall Thickness                             | .025"     |
| Tensile Strength (Yarn) (ASTM D-2256 Lbs)  | 7.5       |
| Specific Gravity (ASTM D-792)              | 1.38      |
| Moisture Absorption % (ASTM D-570)         | .12       |
| Hard Vacuum Data (ASTM E-595 at 10-5 torr) | NA        |
| TML  | .19       |
| CVCM                                       | .00       |
| WVR  | .16       |
| Smoke D-Max (ASTM E-662)                   | 56        |
| Outgassing                                 | Medium    |
| Oxygen Index (ASTM D-2863)                 | 21        |
|  |           |

#### **FLAMMABILITY**

| Rating (FMVSS-302 Approved) | UL94 |
|-----------------------------|------|
|-----------------------------|------|

#### **OPERATING TEMPERATURES**

| Melt Point (ASTM D-2117)         | 482°F / 250°C |
|----------------------------------|---------------|
| Maximum Continuous (Mil-I-23053) | 257°F / 125°C |
| Minimum Continuous (Mil-l-23053) | -94°F / -70°C |

#### **CHEMICAL RESISTANCE**

| 1=No Effect 2=Little Effect 3=Affected | 4=More Affected 5=Severely Affected |
|--|-------------------------------------|
| Aromatic Solvents                      | 2                                   |
| Aliphatic Solvents                     | 1                                   |
| Chlorinated Solvents                   | 3                                   |
| Weak Bases                             | 1                                   |
| Salts                                  | 1                                   |
| Strong Bases                           | 2                                   |
| Salt Water (0-S-1926)                  | 1                                   |
| Hydraulic Fluid (MIL-H-5606)           | 1                                   |
| Lube Oil (MIL-L-7808)                  | 1                                   |
| De-Icing Fluid (MIL-A-8243)            | 1                                   |
| Strong Acids                           | 3                                   |
| Strong Oxidants                        | 2                                   |
| Esters/Ketones                         | 1                                   |
| UV Light                               | 1                                   |
| Petroleum                              | 1                                   |
| Fungus (ASTM G-21)                     | 1                                   |
| Halogen Free                           | Yes                                 |
| RoHS                                   | Yes                                 |
| SVHC                                   | None                                |

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