



PAINTBRUSH FILAMENT PROPERTIES

- Improved performance over natural bristles; notably in:
 - Moisture Absorption
 - Bend Recovery
 - Wear
- Consistent filament quality
- Superior paint application
- High chemical resistance
- Excellent abrasion resistance
- Excellent elastic memory

With over 40 years of experience in the production of both [Tapered](#) and [Level](#) brush filament products, all of us at [Monahan Filaments Inc.](#) know what it takes to produce the finest quality paintbrush filaments in the world. Our aim is to continually exceed expectations in the industry through the relentless pursuit of producing the best quality paintbrush filaments.

Through seamless design and sound partnerships with the world's finest paintbrush manufacturers, we are committed to supplying the industry with quality crafted, technically designed, and dependable filament products.

As the world market continues to move towards synthetic filaments, we are well positioned to develop products capable of meeting the demanding standards required by the industry. [Monahan Filaments Inc.](#), continues in the desire to be the most flexible, competitive and viable supplier to this industry, and remains more committed than ever to delivering value added products.

MFI paintbrush fibers come in tapered nylon, tapered polyester, and level polyester.



THERMOPLASTIC FILAMENT PROPERTIES

THERMOPLASTIC MATERIAL	Nylon 6.12	Polyester
Thermal Properties		
Melting Temperature	215°C	225°C
Softening Temperature	105°C	120°C
Max Continuous Use Temperature	65°C	100°C
Water Absorption Properties		
24 hrs at 23°C, 65% Rel. Humidity	0.04%	0.10-.20%
Saturation for 24 Hours	3.00%	0.20%
Chemical Resistance Properties		
Alkali	Good	Poor
Mineral Acids	Poor	Good
Organic Acids	Poor	Good
Oxidizing Agents	Fair	Good
Organic Solvents	Good	Good
Petroleum	Good	Good

The information contained herein is based on laboratory tests, published data and current processing methods and is believed to be accurate. Specifications will be maintained as accurately as possible, but no warranties or guarantees are expressed or implied regarding the accuracy or the performance of these materials. Samples are available on request for specific tests.



TAPERED NYLON FILAMENTS

NYLON SOLID ROUND ●

- Produced with Nylon 6.12 resin for demanding Professional Paintbrushes
- Excellent stiffness, abrasion resistance and superior bend recovery
- Tapered Nylon filaments release paint evenly, uniformly and smoothly
- Long lasting compared to natural bristle
- Chemical Resistance to most solvents used in today's paint

NYLON RIBBED ✕

- Produced with Nylon 6.12 resin for demanding Professional Paintbrushes
- Ribbed shape reduces brush weight, resulting in lower cost per brush
- Nylon ribbed shape weighs 80% as much as solid round
- Easy finishing creating "flagged split ends"
- Better bend recovery and durability compared to hollow filaments

NYLON SPOKED HOLLOW ⚙

- Produced with Nylon 6.12 resin for demanding Professional Paintbrushes
- Ribbed shape reduces brush weight, resulting in lower cost per brush
- Nylon ribbed shape weighs 80% as much as solid round
- Easy finishing creating "flagged split ends"
- Better bend recovery and durability compared to hollow filaments

Colors: Natural, Gold, Black, Sable

Standard Packaging: 22 lbs.

Available Lengths:

Length (in)	2	2¼	2½	2¾	3	3¼	3½	3¾	4	4¼	4½	4¾
Length (mm)	51	57	64	70	76	83	89	95	102	108	114	121
09/05	✓	✓	✓	✓	✓	✓						
12/08			✓	✓	✓	✓	✓	✓				
15/10				✓	✓	✓	✓	✓	✓	✓	✓	✓

Cross Section		Specific Gravity	Bulk Density (g/cm³)*
Solid Round Nylon	●	1.07	0.0112
Ribbed Nylon	✕	0.9	0.0086
Hollow Nylon	⚙	0.7	0.0071

* Density based on 12/08 x 3



TAPERED POLYESTER FILAMENTS

POLYESTER SOLID ROUND ●

- Produced with polyester PBT resin for demanding Professional Paintbrushes
- Polyester is a universal filament making it ideal for all paint mediums
- Excellent stiffness, abrasion resistance and superior bend recovery
- Polyester filaments exhibit uniform paint release preventing dumping of paint
- Polyester filaments absorb very little moisture; retaining wet stiffness in latex and water based paints
- Excellent "tipping" and finishing characteristics

POLYESTER RIBBED ✕

- Produced with a Polyester formulated blend for Consumer Paintbrushes
- Polyester is a universal filament making it ideal for all paint mediums
- Ribbed shape reduces brush weight, resulting in lower cost per brush
- Polyester Ribbed shape weighs 85% as much as solid round
- Polyester filaments absorb very little moisture; retaining wet stiffness in latex and water based paints
- Easy finishing creating "flagged split ends"

POLYESTER HOLLOW ○

- Produced with a Polyester formulated blend for Consumer Paintbrushes
- Polyester is a universal filament making it ideal for all paint mediums
- Hollow shape reduces brush weight closer to low end level brushes
- Provides quality associated with tapered filaments
- Low moisture absorption; retaining wet stiffness in latex and water based paints
- Good flagging and finishing versus ribbed shape

POLYESTER SPOKED HOLLOW ⚙

- Produced with polyester PBT resin for demanding Professional Paintbrushes
- Polyester is a universal filament making it ideal for all paint mediums
- Excellent stiffness, abrasion resistance and superior bend recovery
- Polyester filaments exhibit uniform paint release preventing dumping of paint
- Polyester filaments absorb very little moisture; retaining wet stiffness in latex and water based paints
- Excellent "tipping" and finishing characteristics

POLYESTER HONEYCOMB HOLLOW ◀▶

- Produced with a Polyester PBT resin for Semi Professional Paintbrushes
- Polyester is a universal filament making it ideal for all paint mediums
- Patent pending shape is lighter than hollow (approx. 12%)
- Honeycomb exhibits superior flag compared to other hollow cross sections
- Low moisture absorption; retaining wet stiffness in latex and water based paints
- Excellent paint out performance compared to standard hollow filaments
- Performs well in automatic mixing and brush making equipment







TAPERED POLYESTER FILAMENTS (cont.)

Colors: Natural, Gold, Black, Sable

Standard Packaging: 25 lbs.

Available Lengths:

Length (in)	2	2¼	2½	2¾	3	3¼	3½	3¾	4	4¼	4½	4¾
Length (mm)	51	57	64	70	76	83	89	95	102	108	114	121
09/05	✓	✓	✓	✓	✓	✓						
12/08			✓	✓	✓	✓	✓	✓				
15/10				✓	✓	✓	✓	✓	✓	✓	✓	✓

Cross Section		Specific Gravity	Bulk Density (g/cm ³)*
Solid Round Polyester		1.33	0.0139
Ribbed Polyester		1.15	0.0107
Hollow Polyester		0.9	0.0088
Honeycomb Polyester		0.7	0.0071

* Density based on 12/08 x 3



LEVEL POLYESTER FILAMENTS

POLYESTER




- Produced with a Polyester formulated blend for quality Consumer Paintbrushes
- Polyester is a universal filament making it ideal for all paint mediums
- Available in Hollow, Ribbed and Solid Round
- Low moisture absorption; retaining wet stiffness in latex and water based paints
- Polyester filaments absorb very little moisture; retaining wet stiffness in latex and water based paints
- Good flagging and finishing characteristics

Colors: Natural, Gold, Black, Sable

Standard Packaging: 25 lbs.

Available Lengths:

Length (in)	2	2¼	2½	2¾	3	3¼	3½	3¾	4	4¼	4½	4¾
Length (mm)	51	57	64	70	76	83	89	95	102	108	114	121
0.20mm / 0.008"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.25mm / 0.010"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
0.30mm / 0.012"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Cross Section		Specific Gravity	Bulk Density (g/cm ³)*
Solid Round Polyester		1.33	0.0139
Ribbed Polyester		1.15	0.0107
Hollow Polyester		0.9	0.0088

* Density based on 12/08 x 3