

# TAPE YARN AND MONOFILAMENT YARN

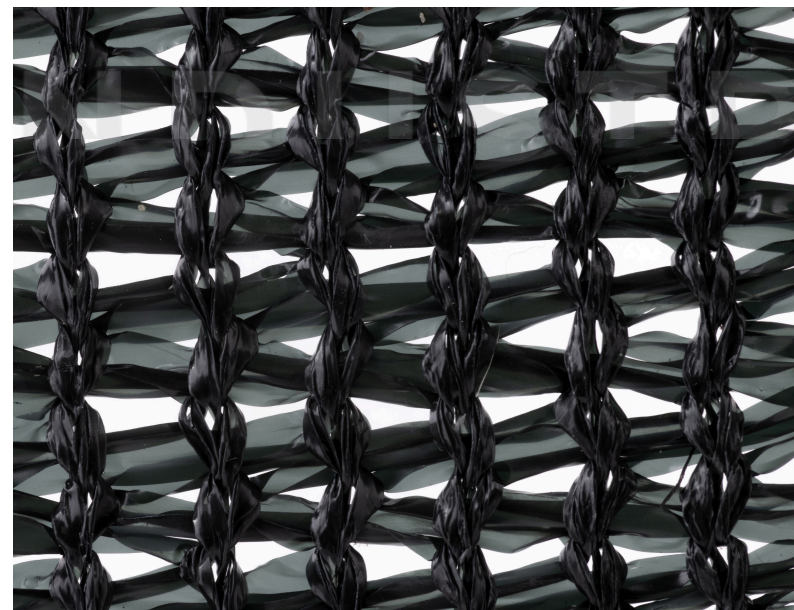
Product Differences and Uses

# TAPE vs MONOFILAMENT

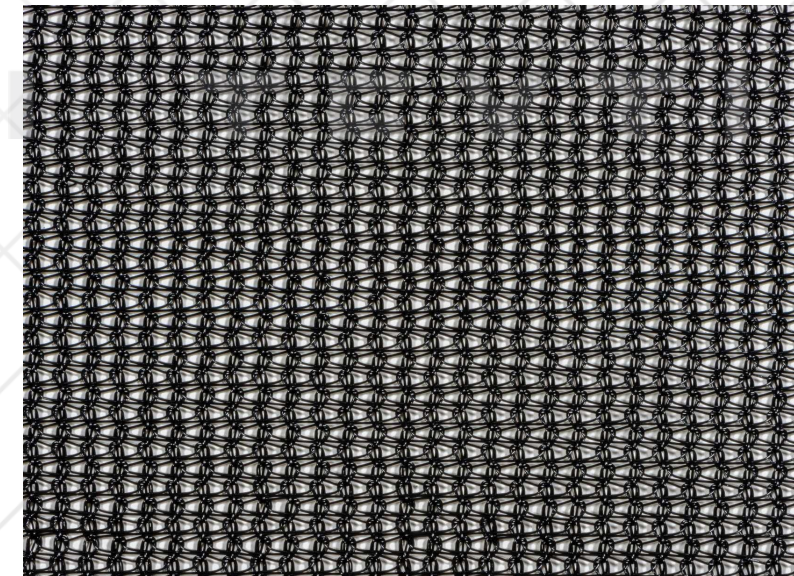
## IS THERE A DIFFERENCE?

- Similarity: Raw pellets melted into a die where extrusion occurs
- Difference: Die shape
  - Monofilament yarn is round or oval
  - Tape yarn is long and thin
- Difference: Thread count
  - Monofilament yarn is extruded as a single yarn
  - Tape yarn starts as a sheet that is slit into multiple threads
- Both processes: Tape yarns and monofilament yarns go through a series of heating and cooling cycles to establish needed characteristics: Strength, Stretch, Dimensional Stability

## THE RESULTING PRODUCT:



Tape Yarn



Monofilament

# YARN COMPARISON

	Tape Yarn	Monofilament Yarn
Shape	Flat, like clear tape	Round, like fishing line
Shade	Above 90% shade is possible	Above 70% shade is difficult
Strength	Lower Strength	Higher Strength
Yarns per Inch	Fewer yarns per inch	More yarns per inch
UV Damage	More susceptible	Less susceptible
Price	Lower price: Requires less raw materials to achieve equal shade	Price reflects increased amount of raw materials needed
Uses	Privacy/Sight Barriers, Temporary Fencing, Throw away Tarps	Crop Cover, Animal shade, Truck Cover, Filtration, Containment
Light Pathway to Crops	Can cause light diffusion, uneven light across crops	Light through a single yarn is more likely to evenly spread across crop

# How Different Yarn Shapes Can Achieves Similar Shade Factors

To achieve the same light blocking need much more yarn. Creating a very different product.

## Mono ROUND Shape

- Requires more yarn per square inch;
- Has less surface area so less UV exposure (it still requires some UV additive to ensure a long life).
- Some mills can't produce over 70% shade.

## Tape FLAT Shape

- Creates more shade per square inch;
- Has a greater surface area per square inch allowing for more UV exposure (adding extra UV additive can prevent this).

Characteristics	80% Mono	87% Tape - Tape
Weight	278 grams/m <sup>2</sup>	142 grams/m <sup>2</sup>
Shade Factor	80%	87%
Burst Strength	367 psi	272 psi
Tear Strength	Warp: 151 lbf Weft: 66 lbf	Warp: 52 lbf Weft: 37 lbf
Air Flow	500 cm3/sec/cm2	212 cm3/sec/cm2

Heavier

Stonger

Lighter and Less Fabric for Similar Shade

Our team of experts are here to help you navigate the world of textile options and possibilities. We handle all your freight and shipping needs. From shade fabric to truck tarp to privacy/site barrier, we have a large supply of fabrics on hand, so you get the exact type and length you need in days, not weeks.

Need a custom material?  
We work with mills to develop your perfect solution.

Contact us today to discuss how we can help you.



**919-232-0470**



**[info@acadiantextiles.com](mailto:info@acadiantextiles.com)**



**[acadiantextiles.com](http://acadiantextiles.com)**