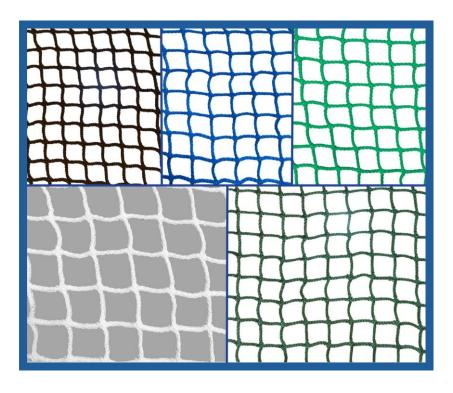


# Suppliers, Importers & Exporters LEISURE & INDUSTRIAL NETTING, TWINE & ROPE

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# PRODUCT SPECIFICATION

PRODUCT	20mm POLYPROPYLENE NETTING
RAW MATERIAL	HIGH TENACITY POLYPROPYLENE UV Stabilised (approx.300kly)
COLOURS	BLACK/BLUE/GREEN/WHITE/YELLOW/RED/BEIGE/CHEVRON
DIA.APPROX TWINE	2.3MM
KNOT TO KNOT NETTING	20MM
KNOT STRENGTH APPROX	89KG
WEIGHT SQUARE METRE	180GR/M2
TENSILE STRENGTH MESH (KN)	0.80KG/MESH



### **ELONGATION**

Commercial polypropylene monofilaments have an elongation at break in the region of 15 to 25 %, Multifilament yarn are in the range of 20 - 30%, and staple fibre 20 - 35%.

# **ELASTIC PROPERTIES**

The elastic properties of polypropylene fibres, in common with other mechanical properties may be varied over a wide range by choice of polymer and processing conditions. Fibres can be produced to meet the requirements of specific applications with regard to elastic properties.

#### HIGH TENACITY FIBRE

The elastic recovery properties of commercial high tenacity fibres are excellent and similar to those of nylon. Immediate recovery after 10% elongation is about 90% with virtually no permanent set.

#### **FLEX RESISTANCE**

Excellent

# **SPECIFIC GRAVITY**

As the case of polythene fibres, the specific gravity of polypropylene varies with the degree of crystallinity. Amorphous polypropylene has a specific gravity of 0.85, commercial fibres reach 0.92 - 0.94. Polypropylene fibres are in the range of 0.90 - 0.91 and highly crystalline fibres reach 0.92 - 0.94. Polypropylene fibres are thus the lightest of all commercial textile fibres being the lighter than all but polyethylene.

#### **EFFECT OF MOISTURE**

Polypropylene is a paraffinic hydrocarbon and if does not absorb water. The moisture regain of polypropylene fibres is so small to be significant and water has no effect on tensile strength and other mechanical properties. Water does not cause and noticeable degradation in polypropylene fibres. Fibres subject to boiling water or steam for long periods show no loss of strength.

# THERMAL PROPERTIES

Softening Point / Melting Point

The softening point of polypropylene fibres is in the region of 150 deg C, and the fibres melt at 160 – 170 deg C. The softening and melting points of specific polypropylenes are determined by the nature of the polymer and by the way the crystallinity has been influenced during the treatment of the fibre after spinning.

# EFFECT OF LOW TEMPERATURE

Polypropylene fibre retains it's flexibility to temperature of 70 deg C or lower. It does not reach the remarkable standard set by polyethylene in this respect, but its low temperature flexibility is excellent for most practical purposes.

#### EFFECT OF SUNLIGHT

Like polyethylene polypropylene is attacked by atmospheric oxygen, and the reaction is stimulated by sunlight. Polypropylene fibre will deteriorate on exposure to light, but may be protected effectively by means of stabilizers.

# **CHEMICAL PROPERTIES**

Acids – Excellent

Alkalis – Excellent resistance, similar to polyethylene

Polypropylene is inert to a wide range of chemicals. Its resistance and susceptibilities are similar to those of polyethylene, but its high crystallinity tends to make it more resistant than polyethylene to those chemicals which degrade olefin fibres.

#### EFFECTS OF ORGANIC SOLVENTS

Excellent resistance, generally similar to polyethylene. There is no known solvent for polypropylene at room temperature.

#### **INSECTS**

Polypropylene can not be digested by insects and related pests such as white ants, dermestid beetles, silverfish and moth larvae. Polypropylene fibre is not liable to attack unless it becomes a barrier which the insect must pass to reach an objective. In this case the insect may be cut through the fibre without digesting it.

#### MICRO ORGANISMS

Polypropylene fibre will not support the growth of mildew or fungi. Some micro-organisms however may grow even on the very small amount of contaminants which may be present on the surface of fibres or yarn in use. Such growth has no effect on the strength of any materials made from polypropylene fibre.