

Rope Fibers

Cotton





Chars at 148°C



Very Good



Chemical Resistance

- Degraded by acids in high concentration or at high temperatures
- · Resistant to alkalis
- · Degraded by organic solvents and sea water



Advantages

Exceptional Handling



Disadvantages

- · Susceptible to deterioration from moisture, rot & mildew
- · Strength can be dramatically affected by basic environmental variables such as the level of humidity

Manila





Chars at 148°C



Very Good



Chemical Resistance

- · Degraded by acids in high concentration or high temperature
- · Degraded by alkalis
- · Resistant to organic solvents



Advantages

Very good creep resistance (gradual elongation under load)



Disadvantages

- Poor microbial resistance
- Can be rough to handle

Polypropylene





Melts at 165°C



Fair







Fair



Chemical Resistance · Resistant to acids

- Resistant to organic solvents, soluble in chlorinated hydrocarbons
- · Light weight



Advantages

Resistant to alkalis

- Inexpensive
- · Unaffected by water
- · Excellent microbial resistance



Disadvantages

- · Low strength relative to other synthetic fibers
- · Susceptible to creep (gradual elongation under load)

Polysteel









· Resistant to acids

Chemical Resistance

- Resistant to alkalis
- Resistant to organic solvents, soluble in chlorinated hydrocarbons



Advantages Light weight

- · Good handling characteristics
- · Unaffected by water
- · Higher strength than polypropylene
- Excellent microbial resistance



Disadvantages

Susceptible to creep (gradual elongation under load)

Nylon





Nylon 6 melts at 218°C Nylon 6.6

melts at 258°C



Good





Melts at 254°C

Chemical Resistance

· Degraded by strong sulphuric acids

· Degraded by strong alkalis at high temperature



Very Good



Chemical Resistance

- · Resistant to weak acids
- · Degraded by concentrated, strong acids
- · Unaffected by most alkalis at room temperature · Resistant to organic solvents, soluble in phenols and formic acid



Advantages

- · Good strength
- Excellent microbial resistance



Disadvantages

- Susceptible to creep (gradual elongation under load)
- · Abrasion resistance of wet nylon is generally poor
- . Minor loss of strength when wet; strength is re-gained once rope dries

Polyester











· Resistant to organic solvents, soluble in phenols

Advantages

· Resistant to mineral acids

- · Excellent microbial resistance · Good strength & durability

Disadvantages

· Unaffected by water

None

Dyneema®

Kevlar®





Decomposes at 500°C



Poor

Synthetic



Melts at 145°C



Fair



Synthetic

Chemical Resistance

- · Resistant to weak acids, bases, water & salt water · Degraded by strong acids & bases in high concentration or

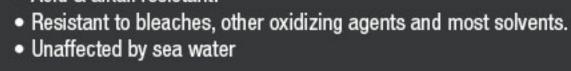
high temperature

Advantages · Exceptional strength

· Exceptional heat resistance

- Disadvantages · Poor shock loading qualities
 - Poor abrasion resistance Expensive









Disadvantages

· Susceptible to creep (gradual elongation under load) Expensive

Technora[®]





Decomposes at 500°C



Poor



Chemical Resistance Resistant to acids

- · Resistant to sea water and steam
- **Advantages**

Disadvantages

the industry. Our ongoing investment into the best

manufacturing equipment and materials available ensures that we will continue to provide the distinct quality and service that have become synonymous with our name.

Cancord Inc. is recognized as

a leading manufacturer within



· Good strength · Unaffected by water

Expensive

