

# Coating Tomorrow's Innovations

## Vectran

Trelleborg offers a wide variety of substrates, providing a myriad of possibilities to expertly pair material properties to customers' specific applications needs. Our substrates can be knitted, woven or non-woven depending on the specific performance attributes required for a given application.



Vectran® is a synthetic fiber and has been manufactured by Kuraray Co. Ltd. since 1990. It is used as a reinforcement fiber in various commercial applications, including ropes, cables, sailcloth, bike tires, and electrical equipment.

Its most innovative use, however, is in a range of aerospace applications, for example, NASA space suits, airbags in NASA's Mars landing vehicles, and bridle cable reinforcement for NASA's Mars Science Laboratory

Badminton players come in contact with Vectran® regularly, too, as it is used in the manufacture of racket strings.

Properties	Value
Tensile Strength (MPa)	600
Elongation at Break (%)	3.8
Specific Gravity	1.40

### Substrate/Fiber Characteristics

- High strength to weight ratio
- Good creep resistance
- High abrasion resistance
- Good flex fatigue properties
- Minimal moisture absorption
- Excellent chemical resistance

### Common Substrate/Fiber Uses

Shore nets, tension members, sling belts, screen cords, envelopes for airships, protective materials, safety nets, belt reinforcement



At Trelleborg, our eyes are on tomorrow as our in-house expert technical teams work in partnership with an increasing range of customers to bring industry-changing ideas to actualization with coated materials- whether it's your concept or ours.  
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