OUTDOOR APPLICATIONS
SPECIAL SEWING THREADS FOR OUTDOOR APPLICATIONS

Sun, wind and rain stress outdoor textiles extremely, which is often underestimated. The different climatic influences – such as UV rays, moisture, acid rain as well as ozone, nitrogen oxide or dirt – show that there is a need for products with technical characteristics that remain unchanged after many years of being exposed to these factors.

Gore® Tenara® and Serabond have an excellent resistance to UV light and weathering and are also high-performing in terms of tensile strength and abrasion resistance. Even long exposure to sunlight and frequent mechanical stress do not reduce seam quality. The breaking strength as well as appearance and color of the seam remain unchanged even under the hardest weathering effects.

Conventional sewing threads can only partly fulfil these requirements. If the outdoor textiles are only exposed to minor and temporary stress, conventional sewing threads, especially with a water-repellent finish, can be used.
15 YEARS WARRANTY

Gore® Tenara® sewing threads will be delivered free from defects in material and workmanship and will not be damaged by exposure to sunlight, weather or water. W. L. Gore & Associates GmbH makes this warranty for a period of 15 years to all products that are stitched with Gore® Tenara® sewing threads.

WEATHERING TEST ACCORDING TO ISO 4892-1 AND 4892-2

The results by Hohenstein Laboratories confirm: Serabond performs excellently in the weathering test.
• Examination according to DIN EN ISO 12402-7 contains artificial weathering according to ISO 4892-1 and ISO 4892-2
• Simulation of the influences of various weather conditions (insolation, rain, fog), as well as simulation of daytime and nighttime
• Test duration: approx. 300 h, test objects: all relevant sizes (10-40)
• Test criteria: maximum tensile force, loop strength, color fastness

APPLICATION FIELDS:

• Sails
• Tents
• Awnings
• Boat covers
• Tarpaulins
• and many more
ePTFE (EXPANDED POLYTETRAFLUORETHYLENE) TAPE

- special sewing thread with excellent UV and weather protection with 15 years warranty
- designed for high speed sewing
- also available in transparent color
- will not fade, stain or discolor
- resistant to UV radiation in sunlight, mould, mildew, acid rain, cleaning solutions, salt water and industrial pollutants

<table>
<thead>
<tr>
<th>Ticket no.</th>
<th>Tex no.</th>
<th>Needle size</th>
<th>Make-up</th>
<th>No. of colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR</td>
<td>270</td>
<td>110-140</td>
<td>18-22</td>
<td>1.050 m FS</td>
</tr>
<tr>
<td>TR</td>
<td>150</td>
<td>100-120</td>
<td>16-19</td>
<td>1.750 m FS</td>
</tr>
<tr>
<td>LTR</td>
<td>110</td>
<td>90-110</td>
<td>14-18</td>
<td>2.100 m FS</td>
</tr>
</tbody>
</table>

FS/KS =

Main application:
- Outdoor textiles: sails, tents, awnings, boat covers, tarpaulins
- Other: artificial turf, bouncy castles

Further applications:
- Outdoor textiles: sails, tents, awnings, boat covers, tarpaulins
- Other: artificial turf, bouncy castles
POLYESTER CONTINUOUS FILAMENT, BONDED

- high-performance bonded special sewing thread for outdoor applications
- extremely durable
- resistant to untwisting and therefore suited for multidirectional sewing
- outstanding UV resistance due to special dyestuffs
- weathering test according to ISO 4892-1 and ISO 4892-2

<table>
<thead>
<tr>
<th>Ticket no.</th>
<th>Tex no.</th>
<th>V no.</th>
<th>Needlesize</th>
<th>Make-up</th>
<th>Weight</th>
<th>No. of colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>270</td>
<td>V277</td>
<td>190-220</td>
<td>25-26</td>
<td>3,100 yd FS</td>
<td>37 oz</td>
</tr>
<tr>
<td>15</td>
<td>210</td>
<td>V207</td>
<td>170-190</td>
<td>24-25</td>
<td>2,000 yd FS</td>
<td>16 oz</td>
</tr>
<tr>
<td>20</td>
<td>135</td>
<td>V138</td>
<td>130-150</td>
<td>21-23</td>
<td>3,000 yd FS</td>
<td>16 oz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,800 yd FS</td>
<td>37 oz</td>
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<tr>
<td>30</td>
<td>90</td>
<td>V92</td>
<td>110-130</td>
<td>18-21</td>
<td>2,500 yd FS</td>
<td>8 oz</td>
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<td></td>
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<td></td>
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<td>5,000 yd FS</td>
<td>16 oz</td>
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<td>10,200 yd FS</td>
<td>32 oz</td>
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<tr>
<td>40</td>
<td>70</td>
<td>V69</td>
<td>90-120</td>
<td>14-19</td>
<td>6,000 m FS</td>
<td>16 oz</td>
</tr>
</tbody>
</table>

FS/KS =  

Main application:
- Outdoor textiles: sails, tents, awnings, boat covers, tarpaulins

Further applications:

Ticket no. Tex no. V no. Needle size Make-up Weight No. of colors
FS/KS =  

Table: 
- 10 270 V277 190-220 25-26 3,100 yd FS 37 oz 2
- 15 210 V207 170-190 24-25 2,000 yd FS 16 oz 14
- 20 135 V138 130-150 21-23 3,000 yd FS 16 oz 34
- 30 90 V92 110-130 18-21 2,500 yd FS 8 oz 34
- 40 70 V69 90-120 14-19 6,000 m FS 16 oz 3
Our management systems are certified according to: