

## MIRAFI Polyfelt TS

| Properties                             | Test Standard                                | Unit                | TS 20                                     | TS 30   | TS 40   | TS 50   | TS 60     | TS 65     | TS 70     | TS 80     |
|----------------------------------------|----------------------------------------------|---------------------|-------------------------------------------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Physical characteristics               | Continuous filament, nonwoven needle punched |                     |                                           |         |         |         |           |           |           |           |
| Polymer                                | 100% polypropylene, UV stabilised            |                     |                                           |         |         |         |           |           |           |           |
| UV resistance                          |                                              |                     |                                           |         |         |         |           |           |           |           |
| Tensile strength retention             | ISO 10319                                    |                     | >70% after 3 months of outdoor weathering |         |         |         |           |           |           |           |
| Puncture strength retention            | ISO 12236                                    |                     | >70% after 3 months of outdoor weathering |         |         |         |           |           |           |           |
| Chemical resistance                    | No influence at pH range 2 -13               |                     |                                           |         |         |         |           |           |           |           |
| Tensile strength (avg.)                | ISO 10319                                    | kN/m                | 9.5                                       | 11.5    | 13.5    | 15      | 19        | 21.5      | 24        | 28        |
| Tensile elongation (MD/CD)             | ISO 10319                                    | %                   | 75/35                                     | 75/35   | 75/35   | 75/35   | 80/35     | 80/40     | 80/40     | 80/40     |
| Performance energy*                    | Calculated                                   | kN/m                | 2.5                                       | 3.2     | 3.7     | 4.1     | 5.5       | 6.5       | 7.2       | 8.4       |
| CBR puncture strength                  | ISO 12236                                    | N                   | 1500                                      | 1750    | 2100    | 2350    | 2900      | 3300      | 3850      | 4250      |
| Effective opening size O <sub>90</sub> | ISO 12956                                    | mm                  | 0.12                                      | 0.10    | 0.10    | 0.10    | 0.09      | 0.09      | 0.09      | 0.08      |
| Vertical water flow (50mm head)        | ISO 11058                                    | l/m <sup>2</sup> /s | 115                                       | 100     | 90      | 85      | 72        | 65        | 55        | 50        |
|                                        |                                              | (mm/s)              |                                           |         |         |         |           |           |           |           |
| Horizontal water flow (20 kPa)         | ISO 12958                                    | l/m.h               | 4                                         | 7       | 9       | 11      | 13        | 14        | 16        | 20        |
| Horizontal water flow (200 kPa)        | ISO 12958                                    | l/m.h               | 1.4                                       | 2.2     | 2.5     | 2.9     | 3.0       | 3.2       | 3.6       | 4.0       |
| Nominal mass                           | ISO 9864                                     | g/m <sup>2</sup>    | 125                                       | 155     | 180     | 200     | 250       | 285       | 325       | 400       |
| Thickness (2 kPa)                      | ISO 9863                                     | mm                  | 1.2                                       | 1.5     | 1.7     | 1.9     | 2.2       | 2.5       | 2.9       | 3.2       |
| Grab strength (MD/CD)                  | ASTM D4632                                   | N                   | 560/510                                   | 690/600 | 825/720 | 920/810 | 1150/1025 | 1300/1200 | 1500/1400 | 1770/1650 |
| Grab elongation (MD/CD)                | ASTM D4632                                   | %                   | 75/40                                     | 75/40   | 75/40   | 75/40   | 75/40     | 75/40     | 75/40     | 75/40     |
| Apparent opening size O <sub>95</sub>  | ASTM D4751                                   | mm                  | 0.26                                      | 0.25    | 0.24    | 0.21    | 0.19      | 0.18      | 0.18      | 0.15      |
| Permittivity                           | ASTM D4491                                   | S <sup>-1</sup>     | 3.0                                       | 2.7     | 2.5     | 2.0     | 2.0       | 1.7       | 1.7       | 1.7       |
| Form of supply                         |                                              |                     |                                           |         |         |         |           |           |           |           |
| Width                                  |                                              | m                   | 4                                         | 4       | 4       | 4       | 4         | 4         | 4         | 4         |
| Length                                 |                                              | m                   | 250                                       | 225     | 200     | 175     | 135       | 125       | 100       | 90        |
| Area                                   |                                              | m <sup>2</sup>      | 1000                                      | 900     | 800     | 700     | 540       | 500       | 400       | 360       |
| Estimated roll weight                  |                                              | kg                  | 135                                       | 150     | 154     | 150     | 145       | 153       | 140       | 154       |

Other forms of supply as well as grades, adjusted to the requirements of specific projects, are available on request.

**NOTES :**

\* Estimated roll weight is a guidance for logistic purpose only.

\* Indicates the ability of the geotextile to absorb construction stress. Performance energy = 1/2 (energy MD + energy CD) where,

Energy MD = 1/2 (tensile strength MD x elongation MD)

Energy CD = 1/2 (tensile strength CD x elongation CD)

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