

Typar[®] SF Geotextile

Technical Data Sheet International

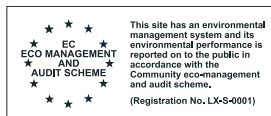
| Property | Standard | Unit | SF20 | SF24 | SF27 | SF32 | SF33 | SF37 | SF40 | SF44 | SF45 | SF49 | SF56 | SF65 | SF78 | SF85 | SF95 |
|--------------------------------------|---------------|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|-----------|-------------|-------------|-------------|
| Descriptive properties | | | | | | | | | | | | | | | | | |
| Area weight | EN ISO 9864 | g/m ² | 68 | 80 | 90 | 110 | 110 | 125 | 136 | 150 | 150 | 165 | 190 | 220 | 260 | 290 | 320 |
| Thickness under 2kN/m ² | EN ISO 9863-1 | mm | 0.35 | 0.38 | 0.39 | 0.43 | 0.45 | 0.45 | 0.47 | 0.48 | 0.50 | 0.49 | 0.57 | 0.59 | 0.65 | 0.73 | 0.74 |
| Thickness under 200kN/m ² | EN ISO 9863-1 | mm | 0.28 | 0.29 | 0.31 | 0.35 | 0.36 | 0.37 | 0.39 | 0.40 | 0.40 | 0.40 | 0.48 | 0.53 | 0.59 | 0.69 | 0.69 |
| Mechanical properties | | | | | | | | | | | | | | | | | |
| Energy absorption | EN ISO 10319 | kJ/m ² | 1.0 | 2.0 | 1.8 | 3.0 | 3.2 | 3.6 | 3.7 | 4.5 | 4.8 | 5.8 | 5.8 | 7.4 | 8.6 | 9.8 | 11.4 |
| Tensile strength | ASTM D4595 | kN/m | 3.4 | 5.0 | 5.5 | 7.0 | 8.0 | 8.5 | 9.0 | 10.3 | 12.0 | 12.6 | 13.1 | 16.5 | 20.0 | 21.3 | 25.0 |
| Elongation | ASTM D4595 | % | 35 | 45 | 50 | 45 | 42 | 52 | 52 | 52 | 50 | 52 | 52 | 55 | 50 | 55 | 55 |
| Tensile strength at 5% | ASTM D4595 | kN/m | 1.8 | 2.3 | 2.6 | 3.3 | 3.0 | 3.5 | 4.0 | 4.2 | 4.4 | 5.2 | 5.7 | 6.4 | 7.8 | 8.2 | 9.2 |
| Puncture strength | ASTM D6241 | N | 500 | 700 | 750 | 1000 | 1100 | 1200 | 1250 | 1575 | 1600 | 1800 | 1850 | 2350 | 2900 | 3150 | 3500 |
| Tear strength | ASTM D4533 | N | 150 | 200 | 210 | 260 | 230 | 290 | 340 | 350 | 270 | 290 | 400 | 390 | 400 | 530 | 470 |
| Grab Strength | ASTM D4632 | N | 300 | 420 | 450 | 625 | 650 | 725 | 750 | 900 | 940 | 1050 | 1100 | 1400 | 1680 | 1750 | 2050 |
| Dynamic cone puncture | EN ISO 13433 | mm | 50 | 45 | 45 | 35 | 35 | 33 | 29 | 27 | 30 | 30 | 22 | 25 | 22 | 16 | 17 |
| Hydraulic properties | | | | | | | | | | | | | | | | | |
| Opening size O ₉₀ wet | EN ISO 12956 | µm | 225 | 210 | 175 | 140 | 200 | 130 | 120 | 100 | 130 | 90 | 80 | 80 | 75 | 70 | 70 |
| Opening size O ₉₅ dry | ASTM D4751 | µm US Sieve | 550 30 | 490 40 | 350 40 | 300 60 | 460 40 | 220 70 | 210 70 | 200 70 | 250 60 | 120 120 | 100 140 | 80 200 | <75 >200 | <75 >200 | <75 >200 |
| Permittivity | ASTM D4491 | 1/s | 3.04 | 2.1 | 2.00 | 1.85 | 1.3 | 1.20 | 1.20 | 1.10 | 0.8 | 0.56 | 0.65 | 0.45 | 0.35 | 0.40 | 0.30 |
| Permeability ViH50 | EN ISO 11058 | 10 ⁻³ m/s | 180 | 110 | 100 | 70 | 65 | 50 | 50 | 40 | 33 | 25 | 35 | 18 | 12 | 15 | 5 |
| Flow rate at 10cm WH | BS 6906-3 | l/(m ² s) | 240 | 190 | 175 | 110 | 113 | 80 | 75 | 70 | 68 | 50 | 60 | 35 | 23 | 30 | 15 |
| Permeability at 20kN/m ² | DIN 60500-4 | 10 ⁻⁴ m/s | 5.2 | 4.9 | 4.7 | 4.6 | 3.5 | 3.2 | 2.8 | 2.6 | 2.6 | 1.7 | 1.9 | 1.6 | 1.4 | 1.6 | 1.1 |
| Permeability at 200kN/m ² | DIN 60500-4 | 10 ⁻⁴ m/s | 3.2 | 3.1 | 3.1 | 2.9 | 2.3 | 1.8 | 2.0 | 1.8 | 1.7 | 1.2 | 1.4 | 1.2 | 1.0 | 1.2 | 0.8 |

| Durability | |
|--|---|
| Predicted to be durable for a minimum of 100 years in all natural soils. | |
| Natural UV light | Good resistance up to several months in direct sunlight, but prolonged exposure, particularly in tropical sunlight, can cause strength losses. Product should be covered after 4 weeks of installation. |
| Moisture | Does not absorb moisture |
| Rot, Mildew | Unaffected |
| Natural occurring acids and alkali | Unaffected |
| Oxydation Resistance EN ISO 13438 | 100% retained strength |
| Chemical Resistance EN 14030 | 100% retained strength |
| Microbiological Resistance EN 12225 | 100% retained strength |

| Product Description | |
|---------------------|-----------------------------------|
| Polymer | 100% Polypropylene. UV stabilized |
| Specific gravity | 0.91 |
| Melting point | 165°C |
| Type of fibre | Continuous filament |
| Fibre diameter | 40/60 µm |
| Fibre bonding | Thermal bonding |
| Color | Grey |

The values correspond to average results obtained in our laboratories and outside institutes and are indicative. The right is reserved to make changes at any time without notice.

| Style | Width (m) | Length (m) | Area (m ²) | Roll diameter (cm) | Roll weight (kg) | Maximum number of rolls per full truck (13.6 loading meters) | D Code |
|-------|-----------|------------|------------------------|--------------------|------------------|--|-----------|
| SF20 | 2.25 | 250 | 563 | 32 | 44 | 240 | D13408146 |
| | 4.50 | 200 | 900 | 28 | 72 | 165 | D13408602 |
| | 5.20 | 400 | 2080 | 38 | 154 | 70 | D13541592 |
| SF24 | 2.10 | 200 | 420 | 29 | 34 | 288 | D14537652 |
| | 4.50 | 200 | 900 | 29 | 72 | 144 | D14537633 |
| | 5.20 | 200 | 1040 | 29 | 83 | 96 | D14537643 |
| SF27 | 2.10 | 200 | 420 | 29 | 43 | 288 | D13407663 |
| | 4.50 | 200 | 900 | 29 | 92 | 144 | D13407762 |
| | 5.20 | 200 | 1040 | 29 | 107 | 96 | D13407507 |
| SF32 | 2.00 | 200 | 400 | 30 | 49 | 288 | D13408024 |
| | 4.50 | 200 | 900 | 30 | 110 | 144 | D13407516 |
| | 5.20 | 200 | 1040 | 30 | 127 | 96 | D13407714 |
| SF33 | 4.50 | 150 | 675 | 29 | 74 | 165 | D14646189 |
| | 5.20 | 150 | 780 | 29 | 86 | 110 | D14584751 |
| SF37 | 2.10 | 150 | 315 | 29 | 45 | 330 | D13407829 |
| | 4.50 | 150 | 675 | 29 | 96 | 165 | D13407708 |
| | 5.20 | 150 | 780 | 29 | 111 | 110 | D13407540 |
| SF40 | 2.10 | 150 | 315 | 30 | 48 | 288 | D13408047 |
| | 4.50 | 150 | 675 | 30 | 103 | 144 | D13407983 |
| | 5.20 | 150 | 780 | 30 | 119 | 96 | D13407475 |
| SF44 | 4.50 | 150 | 675 | 31 | 113 | 144 | D13539827 |
| | 5.20 | 150 | 780 | 31 | 130 | 96 | D13408626 |
| SF45 | 4.50 | 100 | 450 | 27 | 68 | 165 | D14662697 |
| | 5.20 | 100 | 520 | 27 | 78 | 110 | D14584767 |
| SF49 | 4.50 | 100 | 450 | 26 | 86 | 165 | D13407830 |
| | 5.20 | 100 | 520 | 26 | 99 | 110 | D13407685 |
| SF56 | 4.50 | 100 | 450 | 29 | 97 | 165 | D13408204 |
| | 5.20 | 100 | 520 | 29 | 112 | 110 | D13407679 |
| SF65 | 4.50 | 100 | 450 | 30 | 110 | 144 | D13408742 |
| | 5.20 | 100 | 520 | 30 | 127 | 96 | D13407722 |
| SF78 | 4.50 | 100 | 450 | 32 | 128 | 144 | D13408712 |
| | 5.20 | 100 | 520 | 32 | 148 | 96 | D13408212 |
| SF85 | 4.50 | 100 | 450 | 33 | 142 | 144 | D13540279 |
| | 5.20 | 100 | 520 | 33 | 164 | 96 | D13540262 |
| SF95 | 5.20 | 100 | 520 | 35 | 179 | 70 | D15520072 |



DuPont™ Typar® materials contain on average 30% and in some cases up to 50% of Post Industrial Recycled (P.I.R.) waste. With this, DuPont significantly reduces the waste generated during Typar® production process and limits the need of using virgin polymer.

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Further product information is available upon request. This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own testing. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.