

Technical Data Sheet

To DIN EN ISO, Marks & Spencer Standards

Febr. 2007

Article Name	X-Tra No.30
Article Description	Machine Embroidery Thread
Composition	100% polyester filament
Harmonised Tariff Number	540110140
Count	130 dtex x 2 120 den x 2
Make Up Available	2500 m cone





Fastness Rating – Scale 1 (worst) – 5 (best)

Fastness to washing at 95°C DIN EN 20105 / M & S C4A	4-5
Fastness to water (damp for 4hrs at 37°C) DIN EN ISO 105-E01 / M & S C6	4-5
Fastness to rubbing dry (10 rubs on dry white Fabric) DIN EN ISO 105-X12 / M & S C8	4
Fastness to rubbing wet (10 rubs on wet white Fabric) DIN EN ISO 105-X12 / M & S C8	3-4
Fastness to dry cleaning DIN EN ISO 105-D01	4-5
Fastness to bleaching with Hypochlorite DIN EN ISO 105-N01 / M & S C10A	4-5

Fastness Rating - Scale 1 (worst) – 8 (best)

Fastness to light (100hrs xenon light) DIN EN ISO 105-B02	6-7 Due to different dye stuffs not applicable to all colors.
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Mechanical-Technological Values

Tensile Strength cN (force until thread breaks, in Centinewton) DIN EN ISO 2062	approx. 850
Elongation (% of stretch extension with weight tension until breaks) DIN EN ISO 2062	approx. 40
Shrinkage (shrinkage at boiling water) DIN 53866 T2	<1 %
Recommendations for care	 max. 20 g Cl/l  max. 30°C  max. 30 min 
Color Card No.	90

dtex = decitex = weight in grams of 10,000m of yarn; den = denier = weight in grams of 9,000m of yarn
 1 denier = 1,111 decitex; 1 Centinewton = slightly more than 1 gram
 dtex x 2 = two-ply of yarn; den x 2 = two-ply of yarn