

SIGMA
CUCIRINI RAMA



SIGMA

30%
POLYAMIDE
70%
COTTON

SIGMA is a yarn consisting of a 30% polyamide core and 70% cotton in the form of a full long-fiber sheath. This product was introduced by Cucirini Rama as a direct and effective response to the growing demand from our customers for solutions to various issues related to garment-dyed, elastane-treated fabrics.

Its advantages are:

- 1) A core-spun yarn with a total elongation of over 32%, specifically designed to balance plasticity and elasticity. It effectively resolves issues related to puckering and the elasticity of seams, which is necessary in stretch fabrics.
- 2) The integrated braided cotton sheath is designed to prevent any breakage, both during sewing and under maximum elongation conditions. This feature allows us to achieve a high level of dye uniformity and use a single product for all required colors, from white to dark shades.
- 3) The internal core provides the yarn with good dynamic strength, and importantly, this value remains consistent over time. In practice, repeated washing does not weaken the seams, effectively preventing thread breakage, whether due to washing or dyeing during production, or in the after-sales.

Characteristics



Elasticity



Elongation
Strength



Uniformity

Applications



READY-
TO-DYE



SPECIAL
USES

Fields of application

SIGMA ET. 50	Sportswear, casual, and informal clothing. Particularly suitable for stretch fabrics.
SIGMA ET. 30	Sportswear, casual, and informal clothing. Particularly suitable for stretch fabrics.
SIGMA ET. 18	Trousers topstitching, sportswear, and casual clothing. Particularly suitable for stretch fabrics.

Item	Tex	Breaking Strength gr	Elongation	Packaging	Needle
SIGMA ET. 50	60	1.200	> 32 %	2.500 yds	110-120
SIGMA ET. 30	90	1.650	> 32 %	2.000 yds	120-130
SIGMA ET. 18	140	2.350	> 32 %	1.250 yds	130-140

The information provided in the technical data sheet is based on averages, and the values may vary. It is the sole responsibility of each user to verify the suitability of the sewing thread for their specific need. Cucirini Rama is available to provide advice for any usage inquiries.

Considerations

- 1) It is not recommended for use in high-abrasion treatments, as they may compromise the integrity of the coating.
- 2) The complex and slow production process of the SIGMA product leads to considerably higher production costs. To reinforce our commitment to manufacturing this highly technological item, we conducted a thorough cost analysis, in collaboration with some leading textile companies, to assess the issues caused by thread breakage. For clarity, it should be noted that the evaluation took into account all costs related to both the production and post-sale phases, excluding only the loss of brand image, which is closely tied to each individual brand. The results showed that reducing the repair rate by just 2-3% is enough to offset the additional cost incurred from using the SIGMA product.
- 3) After numerous testing, our technicians confirm that, to minimize costs, good quality results can still be achieved by using the SIGMA product for the needle and the New Cotton product for the understitching and remaining seams.
- 4) Given the complexity of the product and production lead times, orders must be accompanied by an agreed-upon schedule.

