

TECHNICAL TUESDAYS

TOPIC: Flax Fibre & its end uses in Textiles

REF: TT/ May 2016/ WK 1

What is flax fibre?

Flax (also known as common flax or linseed), with the binomial name *Linum usitatissimum*, the genus. It is a food and fiber crop that is cultivated in cooler regions of the world.

Physical properties:

1. Length: The average length of fiber varies from 90-125 cm. length of individual fiber cells are 6-65 mm (¼ inch – 2 ½ inch) and mean diameter of about 0.02mm (1/1200 inch).
2. Color: Brownish, light, ivory, grey.
3. Tensile/Strength: it is stronger than cotton fiber. Tenacity varies from 6.5 to 8 gm/denier
4. Elongation: The elongation at break is approximately 1.8% (dry) & 2.2 (Wet).
5. Bending properties: it has a high degree of rigidity and resists bending.
6. Specific gravity: 1.54
7. Effect of moisture: M.R%=12% (std)
8. Effect of heat: Highly resistant to decomposition up to about 120° C the fibers begin to discolor. Sp. Heat is 0.322. It is good conductor of heat. So linen sheet are so cold in summer season.
9. Resiliency: Low
10. Abrasion resistance: Moderate
11. Dimensional stability: Good but easily tend to crease.

End uses:

Fishing nets

Book binder's thread

Leather working threads

Sewing thread, suture thread

Flax are also used to produce clothing, household, industrial and furnishing fabric

Twine and ropes.

The linen fiber are extensively used in fine table damasks, handkerchiefs and sheer linen fabrics, Sports wear.

Wishing you a great week ahead!

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