

What is SILK?

Silk is a natural protein fiber, some forms of which can be woven into textiles. Silk is produced by several insects, like silk worms but generally only the silk of moth caterpillars has been used for textile manufacturing.

Manufacturing

Silk moths lay eggs on specially prepared paper. The eggs hatch and the caterpillars (silkworms) are fed fresh mulberry leaves. After about 35 days and 4 moltings, the caterpillars are 10,000 times heavier than when hatched and are ready to begin spinning a cocoon. A straw frame is placed over the tray of caterpillars, and each caterpillar begins spinning a cocoon by moving its head in a pattern. Two glands produce liquid silk and force it through openings in the head called spinnerets. Liquid silk is coated in sericin, a water-soluble protective gum, and solidifies on contact with the air. Within 2–3 days, the caterpillar spins about 1 mile of filament and is completely encased in a cocoon. The silk farmers then heat the cocoons to kill them, leaving some to metamorphose into moths to breed the next generation of caterpillars. Harvested cocoons are then soaked in boiling water to soften the sericin holding the silk fibers together in a cocoon shape. The fibers are then unwound to produce a continuous thread. Since a single thread is too fine and fragile for commercial use, anywhere from three to ten strands are spun together to form a single thread of silk.

Applications

Home

Silk's attractive lustre and drape makes it suitable for many furnishing applications. It is used for upholstery, wall coverings, window treatments (if blended with another fiber), rugs, bedding and wall hangings.

Clothing

Silk's absorbency makes it comfortable to wear in warm weather and while active. Its low conductivity keeps warm air close to the skin during cold weather. It is often used for clothing such as shirts, ties, blouses, formal dresses, high fashion clothes, lining, lingerie, pajamas, robes, dress suits, sun dresses and Eastern folk costumes. For practical use, silk is excellent as clothing that protects from many biting insects that would ordinarily pierce clothing, such as mosquitoes and horseflies.

Industry

Silk had many industrial and commercial uses, such as in parachutes, bicycle tires, comforter filling and artillery gunpowder bags.

Collection(s)

Silk & Linen