Guide to synthetic fabrics

Know what synthetics are called so that you can spot what to avoid when buying new clothes

Fabric name to look for on labels	Made from	Description (adapted from loveyourclothes.com)	Clothes that it is normally found in
Acrylic	Acrylontrile (petrochemical)	Similar to wool in that it is warm and soft, but does not absorb water.	Warm clothing such as jumpers and fleeces
Nylon	Polyamide	Very strong, elastic and lightweight. Often blended with natural fibres to give durability and stretch. However, melts when exposed to high heat.	Hosiery, underwear, swimwear and sportswear
Polyester	Polyethylene terephthalate	Used in most types of clothing due to its durability and low production costs. Often blended with natural fibres such as cotton or wool or with artificial fibres, to make the fabric more durable and easier to wash.	Most types of clothing (trousers, blouses, socks)
Spandex, lycra or elastane	A polyester-polyurethane co-polymer	Lightweight, strong, very elastic and non-absorbent to water and oils. Spandex is highly elastic and always reverts to its original form after stretching making it ideal for garments that are intended to cling to the body.	Tights, sportswear and swimwear

Guide to natural fabrics

Natural fabrics are made from fibres from organic materials. As these materials are natural, they actually absorb CO2 from the atmosphere while they grow, helping to offset some of the emissions created later on in the textile supply chain. Here are some of the most common sources of natural fibres and what you should look out for when purchasing new items:

Fabric	Why choose this fabric	Certifications to look for to know that the brand is sustainable and ethical in their materials and production
Cotton	Although natural, non-organic cotton is a massive drain on water supplies and has a lot of damaging environmental impacts from pesticide overuse. However, organic cotton is grown without pesticides and synthetic fertilizers and processed with no chemicals, using 62% less energy and 88% less water than conventional cotton[1].	
Recycled cotton	Produced from post-industrial or post-consumer waste. Recycling cotton is often used by many ethical fashion brands to prevent waste ending up in landfill.	
Hemp	Dubbed 'the most eco-friendly natural fabric', organic hemp is high yielding (producing high quantities of fabric per ground space needed), requires much less water than cotton and can be grown without pesticides. Additionally, growing hemp can clean contaminated soil. Unfortunately, it is a lot harder to grow and so tends to be more expensive than other sustainable fabrics.	
Linen (flax)	Organic linen (from the flax plant) is similar to hemp in terms of sustainability. Its growth requires very little fertilizer, pesticide, and irrigation. Linen doesn't produce as much fabric for the space it uses to grow as hemp, but is easier to grow.	
Bamboo	Bamboo can be harvested without killing the plant itself, meaning it can regrow quickly. As a species of grass, it is one of the fastest growing plants on the planet, so it can produce amount of fabric. Like hemp, bamboo is able to absorb carbon faster than some trees[2]. Not all bamboo fabrics are eco-friendly as some can involve very harmful chemically intensive treatments. So make sure that your bamboo fabrics are made from bamboo linen or 'lyocell'.	

References:
1: Harshitha AG, Kumar S, Jain A. A Review on Organic Cotton: Various Challenges, Issues and Application for Smart Agriculture. In2021 10th International Conference on System Modeling & Advancement in Research Trends (SMART) 2021 Dec 10 (pp. 143-149)
2: Yiping L, Yanxia L, Buckingham K, Henley G, Guomo Z. Bamboo and Climate Change Mitigation: a comparative analysis of carbon sequestration. International network for Bamboo and Rattan. 2010;30