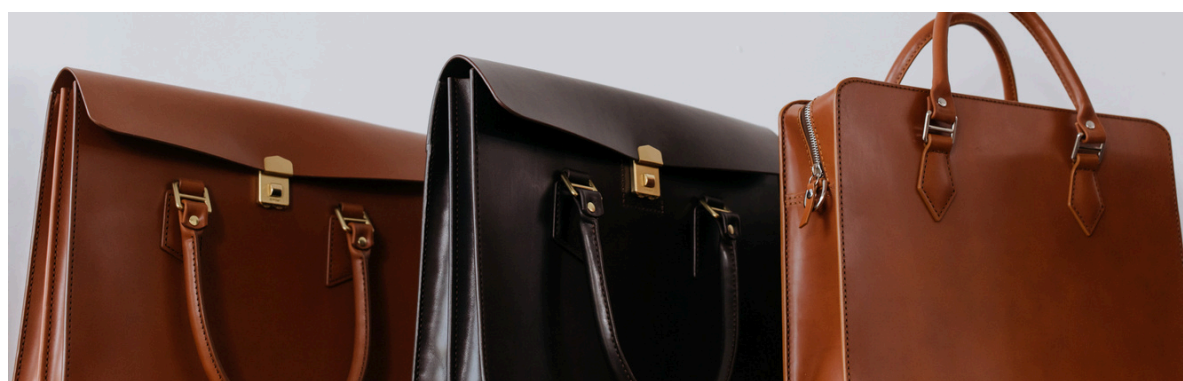
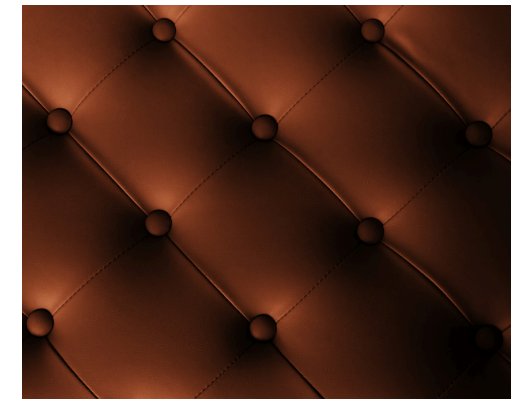
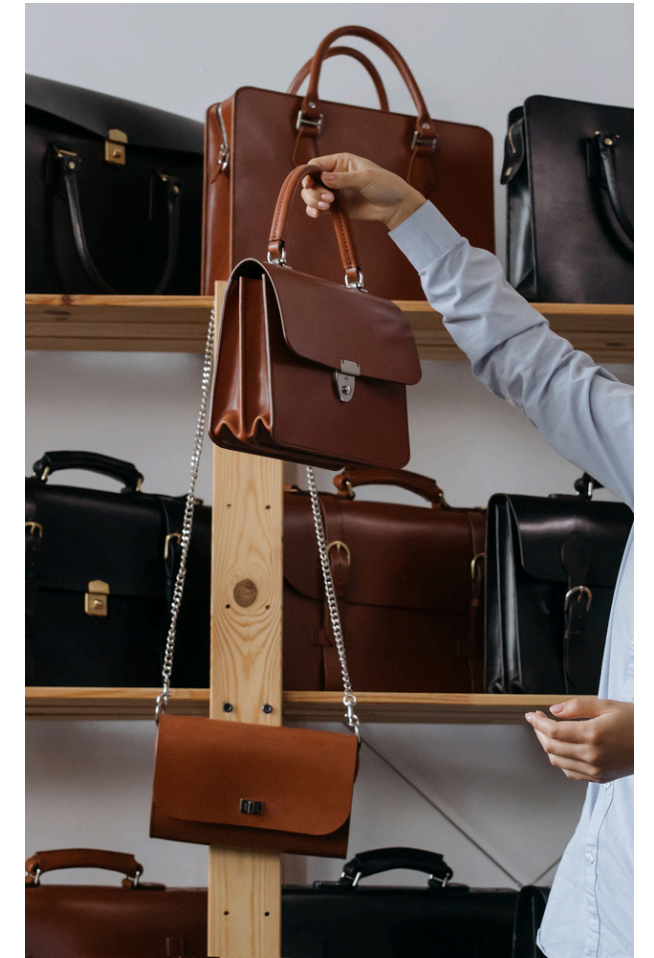


Leather

Kate Mirpuri

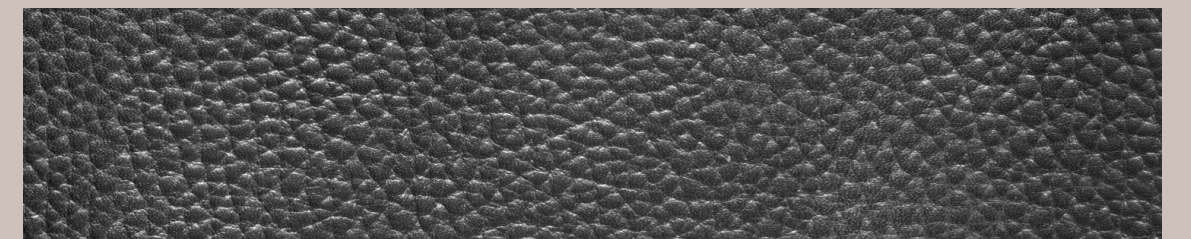


What is leather?

Leather is used in the fashion industry a lot for clothes, accessories and more. Some of the most common uses include: Jackets, coats, pants, skirts, shoes, belts, wallets, handbags, gloves, and hats



Leather is a material made from the skin of an animal, most commonly cowhide, that is treated through a process called tanning to make it durable and long-lasting. This process involves using tanning agents, like plant polyphenols or chromium salts, to stabilize the collagen in the skin, preventing it from rotting and making it water-resistant.



Types of leather

Leather is generally categorized into five main types:

1. Full-grain leather
2. Top-grain leather
3. Genuine leather/split-grain
4. Bonded leather
5. Faux/synthetic leather



Full-grain is the highest quality, retaining the natural grain and imperfections of the animal hide. Top-grain is the second highest quality, with imperfections removed or corrected. Genuine leather, or split-grain is made from the lower layers of the hide, making it a more affordable option. Bonded leather is made from leather scraps and synthetic binders. Lastly, faux leather is a synthetic material that mimics the look and feel of leather.

History of leather

The Egyptians and Hebrews developed vegetable tanning around 400 BCE, which used natural tannins from plants to preserve the hide. By the 15th century, leather tanning became widespread in Europe. Today, the leading producers of leather today are China and India.



Leather making is an ancient art, with the earliest evidence of leather working dating back over 7,000 years. Early humans discovered ways to preserve animal hides by drying them in the sun, softening them with animal fats and brains, and preserving them with salting and smoking. Over time, techniques like vegetable tanning were developed, and the practice spread across different civilizations. The Industrial Revolution further transformed leather production with the introduction of machines and new tanning methods.

The leather industry

The footwear industry, particularly brands like Nike and Adidas, heavily relies on leather due to its durability, but luxury fashion houses like Hermès, Prada, Louis Vuitton, and Fendi also utilize large quantities of leather for their handbags, accessories, and clothing.



The global leather market is a sizable industry, estimated to be worth \$498.57 billion in 2024. It is expected to continue growing, potentially reaching \$855.36 billion by 2032. China is the main producer of leather goods, with approximately 4 billion square feet produced annually. The industry is a significant employer, with an estimated 50,000 people employed in the US leather manufacturing industry alone.

Environmental Impact of leather

Leather production has significant environmental impacts, stemming from the meat industry, tanning processes, and land use. It contributes to deforestation, greenhouse gas emissions, water pollution, and habitat loss. The tanning process, in particular, uses harmful chemicals and large amounts of water.



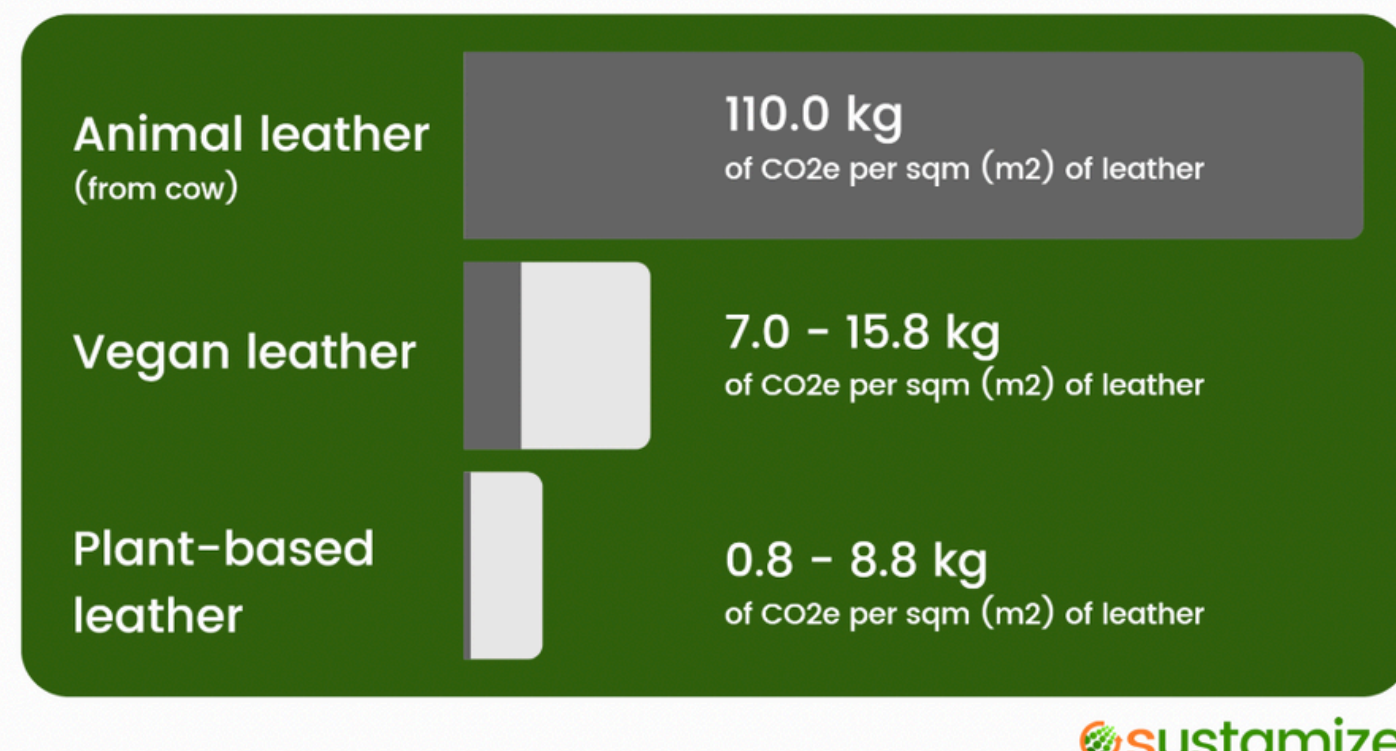
For example, a leather tote bag uses 17,128 liters of water to process and create it, and produces over 100kg of CO₂.



Additionally, People who work in and live near tanneries suffer. Many die of cancer possibly caused by exposure to toxic chemicals used to process and dye the leather. The Centers for Disease Control and Prevention found that the incidence of leukemia among residents in an area near one tannery in Kentucky was five times the U.S. average.

How can you help?

Carbon Footprints of Different Types of Leather.



To reduce the negative impacts of leather, consumers can choose sustainable alternatives, support ethical sourcing practices, and extend the lifespan of their leather products. Additionally, brands and companies can adopt cleaner technologies and prioritize traceability in their supply chains. Innovative and sustainable solutions present a variety of plant-based leather materials made from mushrooms, pineapple and corn to coconut, banana, apple, cactus, green tea, coffee grounds and many more. Plant-based leather addresses most of the issues animal leather and vegan leather create. It is bio-degradable, cruelty-free, and generates fewer carbon emissions than its predecessors. In fact, some of the plant-based leathers are as durable as animal leather, while being attractive and even give a feel and appearance similar to animal leather

Thank you!

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