

SUMMARY OF THE DIFFERENT TYPES OF TANNING

LEATHER



NATURALLY

THE DIFFERENT TYPES OF TANNING

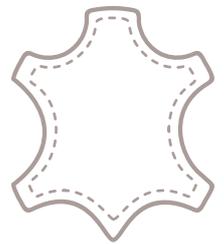
THERE ARE **THREE KEY** TANNING METHODS USED TO MAKE LEATHER: **CHROME** TANNING, **VEGETABLE** TANNING AND **CHROME-FREE** TANNING

ABOUT 75% OF LEATHER MADE TODAY IS CHROME TANNED.

The process uses **trivalent chromium (Cr III)**, which is a safe substance that also represents an essential part of our diet with many people taking daily supplements that contain it.

Misinformation about the leather industry sometimes suggests that **hexavalent chrome**, or chromium VI (Cr VI) is used and that it is carcinogenic. Chromium VI is not used in the manufacture of leather and there are **clear** and **effective** industry **guidelines** set out by the **Leather Working Group** to prevent its formation in leather post-tanning.

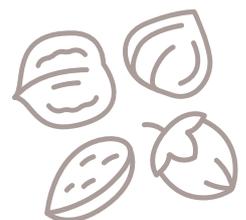
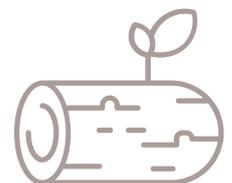
The process of **chrome tanning** is constantly being upgraded by better uptake, less usage, comprehensive recycling, reduced water consumption and **careful management of waste**. Best practices of chrome tanning use half the chemicals required by other methods and produces effluent content below legal requirements. Chrome tanning produces **consistent leathers** that can be used or worn year after year **without any loss of properties**.



VEGETABLE TANNING IS THE **OLDEST TANNING METHOD**, IT USES **EXTRACTS FROM WOOD**, AND **NUTS OF TREES AND SHRUBS** WITH RESPONSIBLE SUPPLIERS ENSURING THESE ARE FROM A **SUSTAINABLE SOURCE**.

It usually takes **longer** to tan leather using this method, but the result is a leather with **distinctive aesthetic** and handle that **ages beautifully**.

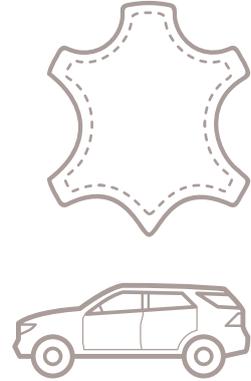
The name and tanning materials used makes it easy to think that vegetable tanned leather is more 'eco-friendly' but the balance across the **whole process** needs to be looked at to make a more meaningful comparison with other methods. For example, vegetable tanning uses a few times the amount of tannins than for chrome-tanned leathers. The **effluent** produced also requires more treatment before it can be discharged. However, it has the benefit of using **natural, sustainable** and **renewable** raw materials.



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ALL OTHER **TANNING METHODS**, ARE KNOWN BY DIFFERENT LABELS BUT ARE USUALLY GROUPED AND REFERRED TO AS 'CHROME-FREE'.

Chrome-free leathers are usually made for a **specialized performance** requirement or often specified for automotive use. The most common is the **aldehyde** tanning that utilizes **glutaraldehyde**. Leathers made with this tanning agent require relatively more chemicals after tanning to improve the leather properties. For this reason the effluent of **chrome-free** process will require additional treatment before it can be discharged.



WHICH IS THE **BEST TANNING METHOD**?

All tanning methods are well managed in production and when all the variables are considered, there is little difference between them regarding the **environmental impact**.

Chrome tanning makes a consistent product that is versatile across a wide range of uses, vegetable tanned leather uses natural resources to create its own **unique look** and **handle** but like the chrome-free they generate effluent that requires additional treatment. Chrome free leathers have **heat and dimensional stability** and other properties that are unique.

THE REQUIREMENTS OF THE TYPE OF LEATHER NEEDED FOR A **SPECIFIC APPLICATION** (PROPERTIES, DESIGN AND COST) WILL DETERMINE WHICH IS THE **BEST TANNING METHOD** TO BE USED. THERE IS LITTLE COMPETITION AMONG THEM BECAUSE OF THE **UNIQUE PROPERTIES** THAT EACH TANNAGE BUILDS IN THE LEATHER.

LEARN MORE WITH LEATHER NATURALLY

Leather Naturally promotes the use of globally-manufactured sustainable leather. Its website www.leathernaturally.org is a key resource for information about modern leather manufacturing and the part it plays in a more sustainable society.

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