

LEARN TO *LOVE* LEATHER



Leather has been a feature of human existence since before records began, when ancient people discovered various methods of preserving animal skins for use as clothing, shelter, footwear and even as floats on rafts. Even now, leather is a feature of our daily lives. We wear leather shoes, carry leather bags and wallets, wear leather clothes and sit on leather upholstery at home and in our cars. It also has a number of unexpected applications such as its use in oil seals in submarine and aeroplane engines and on prosthetic limbs.



Modern production techniques allow tanners to add to the aesthetic and functional qualities of leather, meaning that it is worn everywhere from the catwalk to the coldest places on Earth. Leather can be made waterproof, fire retardant, stain-proof, lightweight and abrasion-resistant and also soft, warm, colourful and sensuous. Leather and leather goods account for 27% of the global luxury goods market and are worn by frontline troops in some of the most dangerous places on the planet.

Despite its beauty, versatility and widespread use, few people actually understand what leather is. Approximately 65% of people under 30 in the UK do not know where leather comes from. Consumer demand for leather has also spawned a huge industry for synthetic imitations which are often mislabelled as leather, damaging both the reputation and value of genuine leather. In recent years there have also been a number of campaigns by strident agenda groups with a range of unsubstantiated and false accusations levelled at both leather and leather manufacture.

For many reasons, leather is unique and valuable and will continue to be inextricably entwined in the history of humanity. This document aims to give an insight into what is and isn't leather and why it should be used to address some of the damaging myths.



WHY LEATHER?

The aesthetic appeal of leather is undeniable. It improves with age, developing a unique and lustrous patina and a worn look that appears more vintage than tired. Quality upholstery leather softens and becomes more supple over time, enhancing the comfort of the furniture. It is durable and, if properly looked after, will last far longer than its synthetic counterparts. It is because of these benefits that leather is the first choice for sporting equipment where durability is essential such as motorcycle clothing, football boots, cricket equipment and walking boots.

Unlike most synthetic materials, leather 'breathes' making it an ideal material for shoe and glove manufacturers as sweat passes through it rather than being trapped as it is with many synthetic materials. This is a very important characteristic and plays a key role in foot health and hygiene, particularly for children.

Leather is a sustainable product made from a renewable resource that is the by-product of another industry. Leather manufacturers take in seven million tonnes of skins and hides from the meat and dairy industries and transform it into a value-added product. Without the leather industry, much of this material would simply require disposal. As long as people continue to eat meat, there will be leather. Conversely, synthetic materials are usually made from unsustainable petrochemicals which cannot be replaced.

Leather is also biodegradable and will degrade in less than 50 years. This may sound like a long time but it compares very favourably with the 500 years that it would take PVC or other synthetics derived from petrochemicals, to biodegrade.

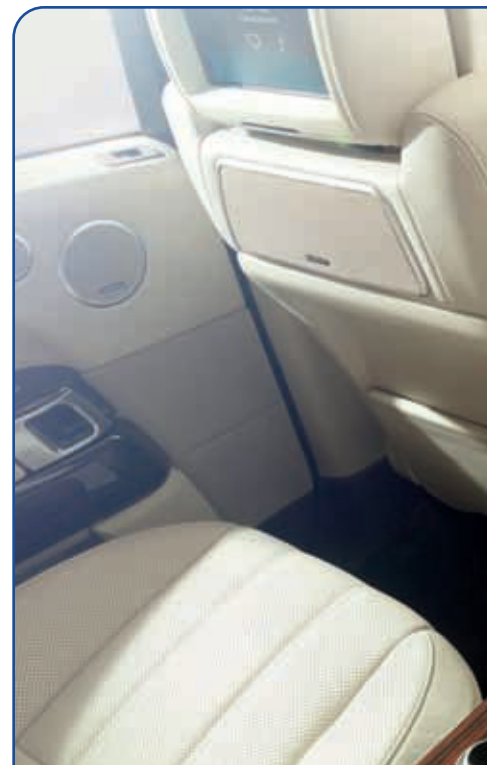


WHAT IS LEATHER?

Put simply leather is the skins and hides of animals that have been treated by tanning to prevent them from rotting. Early civilisations used smoke, salt, drying and even animal brains to tan skins and hides, providing them with a versatile material for a variety of uses. These days tanners use modern chemistry to tan their materials which can be broadly split into three categories: mineral tanning which is predominantly chrome tanning using chromium salts; vegetable tanning using extracts from plants such as mimosa or oak; and synthetic tanning using organic chemicals. The choice of tanning material is mostly dictated by the end use of the leather but approximately 85% of the world's leather today is tanned with Chromium III sulphate.



Getting a skin or hide to the point of being tanned is a complex, stepwise process, necessitating the removal of dirt, hair, fat and extraneous proteins. Depending on the final product, skins and hides may be split horizontally, resulting in grain (the upper layer) and flesh (the lower layer) splits; both can be used to make leather. Once tanned, the leather is treated to achieve the desired properties going through a number of processes to colour, soften, adjust the thickness and finish. The process is complicated by the fact that raw hides and skins are natural materials and consequently quite variable, so much of the process requires the subtle input of experienced workers to combine modern manufacture with traditional craftsmanship.



WHAT IS NOT LEATHER?

Naturally, leather has its imitators. 'Leatherette', 'Pleather', 'PU-leather', 'E-leather' and many more are materials aiming to mimic the appearance and characteristics of leather. However, they are not by any definition, leather. The relevant British and European standards define leather as 'hide or skin with its original fibrous structure more or less intact, tanned to be imputrescible, where the hair or wool may or may not have been removed, whether or not the hide or skin has been split into layers or segmented either before or after tanning and where any surface coating or surface layer, however applied, is not thicker than 0.15 mm'. The term 'leather' in any language, and those derived from it or synonyms, is reserved exclusively for the product as defined above. This also applies in cases where the term 'leather' is used as an adjective, a noun or inserted as a prefix or suffix in other words. The term 'leather' cannot be used in the denomination of man-made materials.

Clearly, this definition excludes any fully synthetic products such as PVC and any leather that is given a heavy coating. Where a coating is greater than 0.15mm but less than a third of the total thickness of the material, it should be described as 'coated leather'. Any product which contains layers of leather and plastic or other materials should be described as laminated leather and an indication of the relative proportion of each material should be given.

It is also important to note that materials that incorporate leather waste that has disintegrated into leather fibre, small pieces or powder and then reconstituted do not meet the criteria to be described as leather. The materials may be described as leather fibre board, recycled leather fibre, bonded leather fibre etc. and should contain a minimum of 50% leather fibre.



WHY DOES THIS MATTER?

There are a number of aesthetic and functional reasons why a synthetic material is not comparable to, and will not age, breathe or perform the same as leather. Leather offers a unique combination of properties that make it both functional and beautiful and ideal for a range of applications.



However, many synthetic materials are very difficult to distinguish from leather. Consumers have often been misled into believing that the product they have bought is real when, in fact, it is a plastic imitation. As

such, there are also statutory reasons for understanding what is and isn't leather. Consumer protection laws guard consumers from being materially misled about the nature of the product they are buying. This could be extended to phrases such as 'faux leather' or 'synthetic chamois' that, while technically correct, without qualification, could be construed as misleading to consumers. Describing bonded leather fibre or PVC as genuine leather would clearly amount to deliberate mis-labelling.

The proportion of leather in an article e.g. the upholstery in a car, must also be given due consideration. In Australia, Toyota were successfully prosecuted by the Australian Competition and Consumer Commission for misrepresenting the upholstery in their cars as 'all leather' when a significant proportion was plastic. In the EU, the Footwear Labelling Directive requires that the upper, sock and outsole of a shoe be a minimum of 80% leather in order to be described as a leather shoe.

Legislation protecting the identity of leather is already in place in a number of countries including Austria, Italy and France. In Argentina, it is a criminal offence to mislabel a product as leather.

The EU is also currently considering making it mandatory to label real leather in all articles using the Footwear Labelling Directive as a template.

A wider understanding of leather could ensure that consumers are not misled and get the quality product that they want.



MYTH-BUSTING

– THE HALF-TRUTHS, MISTRUTHS AND UNTRUTHS ABOUT LEATHER

There are numerous accusations levelled at the leather industry, usually by uninformed or actively mendacious agenda groups. While these assertions are almost entirely spurious, it is important that they should be addressed. They include:

'The leather industry is responsible for the death of millions of animals'

– put bluntly, no meat means no leather. Hides and skins, produced as a by-product of the farming of livestock for meat and milk for human consumption, account for over 99% of the raw material used by the global leather industry. The hide or skin of the animal accounts for less than 10% of the animal's value and considerably less when milk production is taken into account. If this raw material was not converted into leather, the meat and dairy industries would have around seven million tonnes of waste to dispose of every year. Leather manufacture turns this waste into a beautiful and sustainable product - not one of the animals involved was reared for its skin.

'Leather damages the environment'

– the vast majority of leather manufacturers strive to produce in the cleanest possible way. Technologies such as reverse osmosis, for the treatment of effluent and gasification, for the conversion of solid wastes to energy have been applied in tanneries around the world. In Australia, the wastes from tanneries are treated to such a standard that they can be used to enrich and water agricultural land. Attention is drawn to isolated, high profile cases of disastrous, poor practice but, globally, the industry continues to adopt cleaner processes and chemicals. In China and Turkey this even extends to the wholesale relocation of tanneries to centralised industrial parks with state of the art effluent treatment plants. And it cannot be forgotten that, unlike many industries, leather manufacture utilises a sustainable raw material that would otherwise be mostly wasted.

'Leather causes cancer'

– leather and leather manufacture are governed by the same regulations as any other manufactured product with regard to cancer-causing chemicals. The allegation that leather causes cancer usually arises from the use of chromium salts to tan material but what is often overlooked is the number of different chromium compounds. Leather manufacture uses a chromium III salt which is not carcinogenic and has toxicity comparable to table salt. Chromium is an essential nutrient and chromium III supplements can be found in health food shops around the world. Chromium VI compounds have been shown to

cause cancers in the lungs, nasal passages and sinuses but, as these compounds are not used in leather manufacture and the route of exposure is by inhalation, they are not relevant to the production or use of leather. Numerous attempts have been made to link leather manufacture to other cancers and have been shown to be, at best, tenuous. Indeed, the only substantive link between cancer and the chemicals in leather involved certain azo-dyestuffs, which have been banned for some time.

'Leather manufacture involves the use of dangerous chemicals'

– almost every industry in the world uses dangerous chemicals and the leather industry is no exception. However, like other industries, it is subject to rigorous regulation with regard to chemical use. Indeed, the use of some chemicals in leather manufacturing is subject to far greater regulation than in other applications. Depending on the standard applied, the limits for formaldehyde and orthophenylphenol are typically 20-30 mg/kg and 500 mg/kg, respectively. Yet both these chemicals are used in cosmetics with limit values of 1000 and 2000 mg/kg, respectively. Oral mouthwashes may contain up to 1000 mg / kg of formaldehyde. It seems perverse that an industry should be accused of flagrantly using dangerous chemicals when those same chemicals attract no attention when present, at much higher concentrations, in other household products.

'Leather manufacture uses arsenic'

– arsenic was once widely used in many industries including as a preservative for leather. It isn't anymore. In much the same way as the use of mercury in the manufacture of hats, the use of arsenic in leather manufacture has been consigned to history.

Leather has been a feature of human existence for millennia and continues to enrich our lives today. No other material compares to its appeal to the senses and its myriad applications. It is a sustainable product adding value and beauty to the waste of another industry. It remains the case that there is no substitute for real leather.



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