



The leather chemical companies have lots of responsibility when it comes to limiting the use of hazardous substances.

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Ten key issues facing the leather supply chain

The leather industry and the leather chemicals industry have faced many challenges together. With greater social and environmental awareness, the pace of change continues to increase and the challenges that arise require faster, smarter responses. The ten issues included in this article are by no means the only ones that the leather supply chain will have to address in the near future, but it is worth examining them to see what progress has been made and how this could also help in other areas.

1. REACH

REACH, a European Union (EU) regulation covering the registration, evaluation and authorisation of chemicals, came into force in June 2007. As well as leather made within the EU, it also covers that which is imported from non-EU countries. The direct impact of REACH on the leather industry was perhaps less than first anticipated, but it has helped to bring about a much greater awareness of the potential hazards of some chemicals. This has had an impact on a number of the other points included in this article.

2. Zero Discharge

The Zero Discharge of Hazardous Chemicals (ZDHC) Foundation was launched in 2011 by a group of sports brands and fashion retail chains. It came in response to concerns about the chemicals being used for manufacturing in a number of industries, including textiles and leather. It is committed to setting limits for hazardous substances and eventually removing them from the manufacturing process of the relevant substrate. This means ensuring the chemicals are not present in the first place, rather than looking at what is in the final product. As a consequence of this, in the leather industry, the responsibility falls principally on the chemical manufacturer, rather than the tanner. A much more open approach and greater understanding is therefore required between the two in order to avoid future problems.

Although the leather chemicals industry has worked closely with ZDHC to ensure that its requirements are relevant and achievable for leather manufacturers, there is a growing concern that, instead of adopting a collective solution to the issue, different brands are seeking their own solutions or those proposed by outside organisations working at various stages of the supply chain. Many of these

standards have been taken directly from other industries and so may have no relevance for leather or may be impossible to achieve. This issue could prove to be one of the most difficult to resolve and *World Leather* intends to explore it further in the future.

3. Robotics

Robotic technology has yet to be widely used in the manufacturing of leather, but there has been a much greater adoption rate by those making articles using the material. This is especially relevant when it comes to leather cutting, which in some cases is now fully automated. The irregular shape of a hide or skin presents some unusual problems when trying to put this in place; it raises the interesting question of whether hides and skins should be trimmed to a standard rectangular shape before processing. This would only be commercially viable if better uses were found for the offcuts. This provides a good opportunity for forward-thinking tanners to work with their customers to fund innovative solutions that would permit the wider use of robotic technology. There is plenty of scope for more use of automation in leather processing. Leather production has tended to move to countries with lower labour costs, but greater levels of automated processing could help level the playing field and increase the amount of leather manufacturing in the developed world.

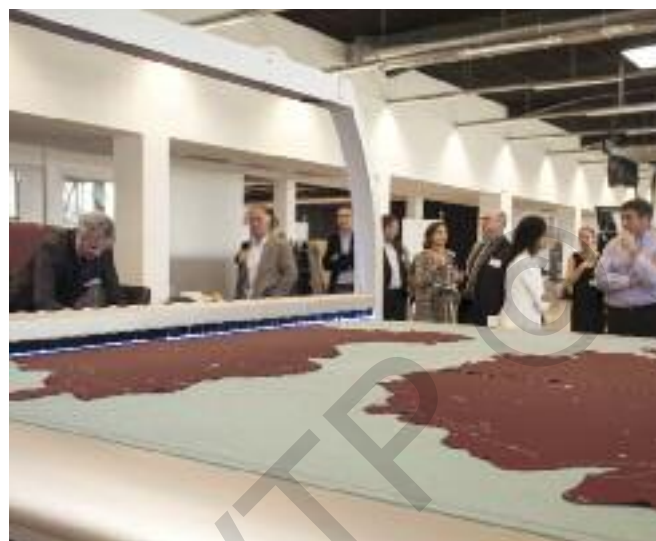
4. Traceability

There is a growing demand from brands and consumers to know the origin of the hides and skins that are being used in the leather manufacturing process. This is in part due to concerns over cattle raised in areas of high deforestation, such as the Amazon basin, as well as for reasons of animal



The leather industry is battling to ensure that only products made from leather are advertised as such.

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Automated technology is widely used by those making articles out of leather but it is less common in the manufacturing of the material.

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welfare. A number of systems are now available that would allow tanners, and eventually those that use leather to make products like bags and shoes, to demonstrate the origin of the leather at least as far back as the point of slaughter, and in some cases all the way back to the farm of origin. It will be interesting to see how far this goes in the future; tanners certainly need to be prepared to answer questions on this and to keep up to date on ways of addressing it.

5. Carbon footprint

The EU is actively trying to establish the carbon footprint for many materials including leather. In the early stages, it looked as though leather would carry the impact of the full lifecycle of the animal providing the hide. This would have meant leather shouldering the burden for around 95% of the carbon figure attributable across the animal's full lifecycle, making its footprint much higher than any of the materials with which it competes. Thankfully, a sensible solution was found and the impact of the animal was shared between all the industries that used anything derived from that animal. This made the share carried by leather relatively small. However, this means that more of the carbon footprint of the leather will be related to the chemicals used in the manufacturing process, so there will be a greater focus on them.

6. Cradle to cradle

In the effort to reduce/eliminate landfill sites around the world, recycling has become more and more important. We used to talk about cradle to grave, what can be done with products at the end of their regular life, but now the hot topic is cradle to cradle, how to reuse products to remove the need for disposal. Increasing demands will be placed on leather manufacturers to ensure that the chemicals they use during their processing do not limit the options to find new life after the original product is finished with.

7. Chrome VI

The issues surrounding Chrome VI are already well documented. They have highlighted the need for the leather and chemical industry to work together to, firstly, ensure the

right information is made available to all concerned and, secondly, to work together to ensure that the right tests are in place.

8. Salt

In many parts of the world, salt in the effluent is one of the most critical problems a tanner has to face. The main source is from the salt used to preserve hides and skins immediately after slaughter until leather processing begins. It is also widely used in the pickling stage immediately before the tannage. The growth of processing leather as far as the wet blue stage at or close to the slaughterhouse has reduced the need for temporary preservation with salt. The availability of pickle-free tannage, including chrome, can further reduce the salt problem.

9. Biocides

Small amounts of biocides are used mainly in the wet stages of leather manufacturing to provide protection against fungal growth. In virtually all other parts of the manufacturing process, tanners have the option to use safer chemistry, but for biocides they need to have the ability to kill off the life forms that threaten to damage the leather at this delicate stage. The industry needs to defend the use of biocides whilst ensuring that they are used as safely as possible and that the particular products used are the best available for the job.

10. Correct description of leather

The leather industry continues to face challenges from manufacturers of alternative materials who promote their materials in such a way as to mislead consumers into believing that their material is actually leather. The controversy over correct descriptions has run for at least 50 years and despite several efforts by the leather industry to combat it, it is still with us. Brazil's main leather industry association CICB, with its 'Lei do Couro' ('Leather Law'), is the latest to try and tackle this issue and they have clearly made some progress. It seems like a good time for other groups to follow their lead and see if this problem can be resolved once and for all. 🌐