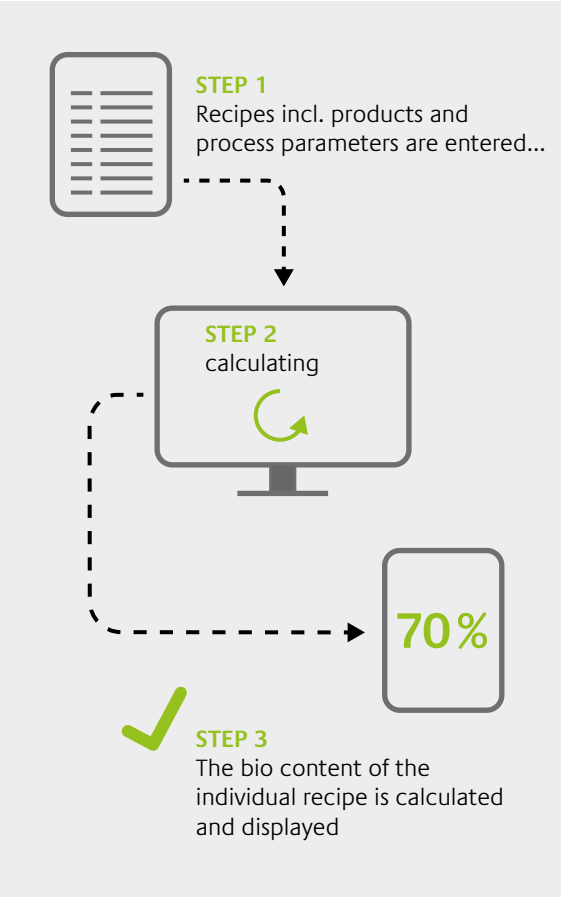




Bio has become predictable

TFL is able to determine the amount of renewable chemistry. The TFL bio-calculator works with drop-down menus from which TFL products can be chosen. Depending on the ratio of bio versus non-bio the total renewable content of the recipe is calculated. With the knowledge about the bio content of the recipes, TFL can predict the bio-based carbon content of the resulting leather.

Please get in touch with our sales representatives to boost the bio-content of your recipe and get it calculated.



TFL PURE TEC PT

Leather is pure nature – and that feels good

➤ Renewable chemistry for sustainable leather





Treated with “PURE” products it’s more than just a phrase

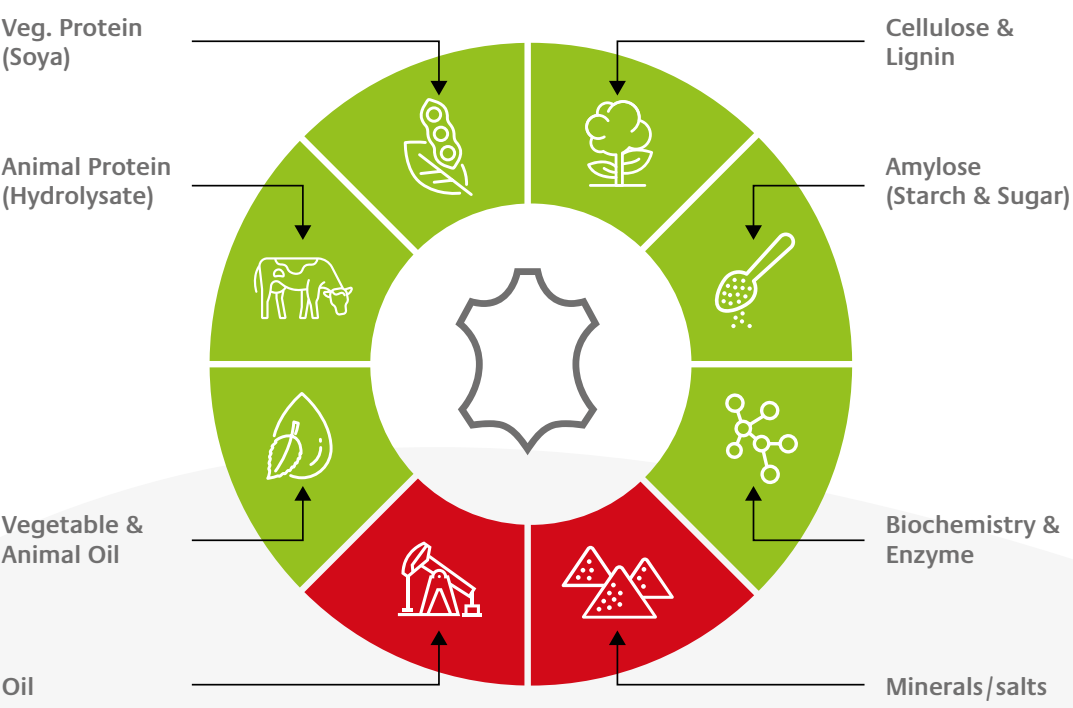
PURE – TFL Renewable Chemistry

Fossil fuels, such as mineral oil, are the source of petrochemicals that industrial companies have transformed into versatile and valued materials for modern life, including chemicals for leather production. However, these are based on finite resources and result in, for example, CO₂ emissions.

Sustainability is no longer a trend, it is a necessity. TFL has taken a leading position to develop and supply the leather industry with new products containing renewable sources of infinite supply and greater sustainability and thus hugely beneficial for the environment. This initiative directly contributes to making leather the ultimate sustainable material!

Renewable biomass is processed and modified by a variety of techniques to produce performance chemicals. Do not think that coming from nature we have made any compromises! These new chemicals can fulfill the toughest standards that are requested by tanneries for all kinds of leather from high fashion to high performance. This involves mainly natural oils and proteins etc., derived from plant origins and/or byproducts from the food industry.

Bio-based products in leather manufacture



Leather is a modern, sustainable material

Raw hides and skins are 100% renewable, and our goal is to produce leather with the highest possible bio-based carbon content. The selection of wet-end & finishing products is essential and will determine the final bio-based content of the resulting leather article. As a result, a finished leather using TFL Pure range products can consist of up to 90% bio-based carbon content! Leather is pure nature – and that feels good.

Many TFL products have a high bio-based content. All products containing $\geq 50\%$ renewable raw materials are named “Pure”. Using “Pure” products in your recipe will turn your leather into a modern, sustainable material.

USDA:

“Bio-based products are both commercial and industrial products that are composed in whole, or in a significant part of biological products or renewable domestic agricultural materials of forestry products.”

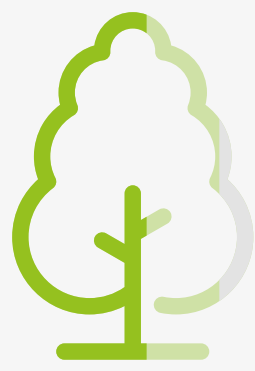
TFL mission:

By delivering real added value, through our genuine bio-based products and services, customers around the world are considering TFL their partner of first choice. We will continue to invest into R&D to enlarge our bio-based product offering – stay tuned, there is more to come!



$\geq 50\%$

Boost the bio-based carbon content of your leather up to 90%



TFL Pure products for...

... wet-end and finishing

We have grouped together under the “Pure” name all the products that contain from 50% up to 100% of renewable raw materials (according to DIN EN 16785-2). This makes it easy for our customers to select the most appropriate bio-based products.

Wet-End	
BAYKANOL® Pure	Dyeing auxiliaries
CORIPOL® Pure	Fatliquoring
LEVOTAN® Pure	Softening polymers
MAGNOPAL® Pure	Wet end polymers
SELLASOL® Pure	Retanning auxiliaries
TANIGAN® Pure	Tanning agents
RETINGAN® Pure	Resin products

Finishing	
AQUADERM® Pure and RODA® Pure	
	PUDs for base- and top coats
	Casein based pigments
	Casein binders
	Base- and top coat compounds
	Feel additives
	Fillers and dullers
	Nitrocellulose emulsions
	Oils and waxes