Proviera®

Probiotics for Leather™

Since 2012 in the leather chemicals market
SCD Probiotics affiliate company

Missouri Exporter of the Year
Award Winner

Kansas State University Ingenuity Award Winner

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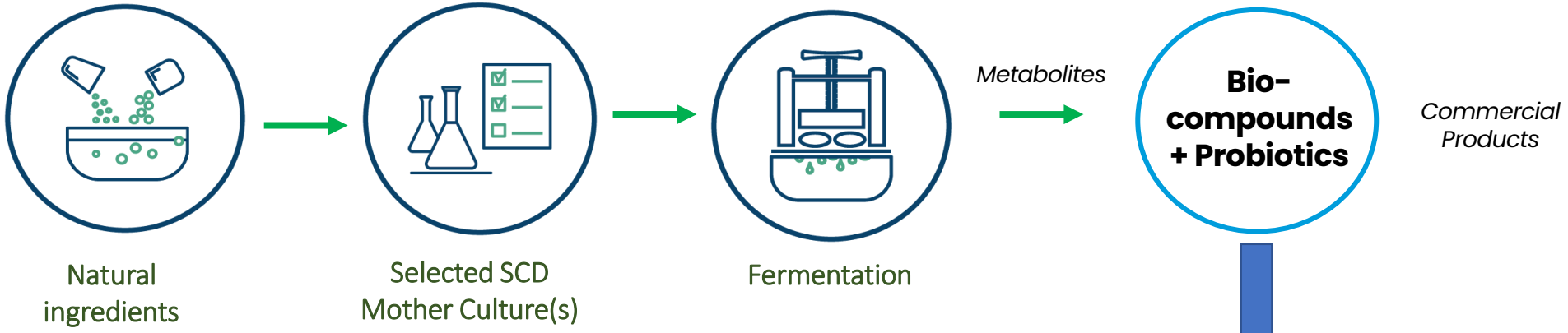
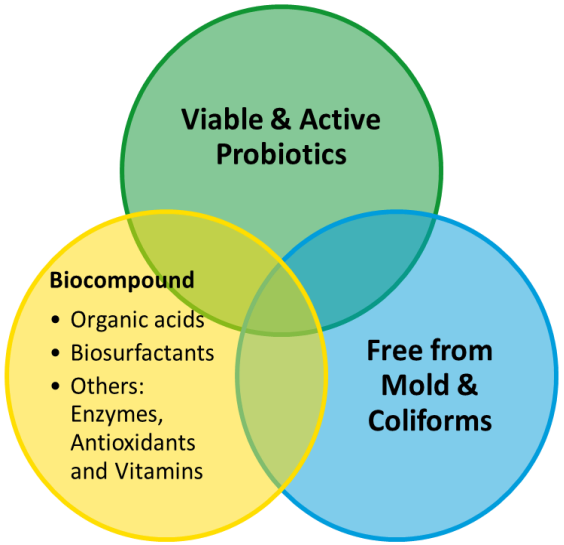
Microbial factories



- Living microbial factories for biochemicals
- Nearly unlimited diversity and synthesis capabilities
- We've perfected groups of micro-organisms and a process that produces commercial validated **biosurfactant-like compounds**



Value proposition / Benefits:

Proviera®
Probiotics for Leather™

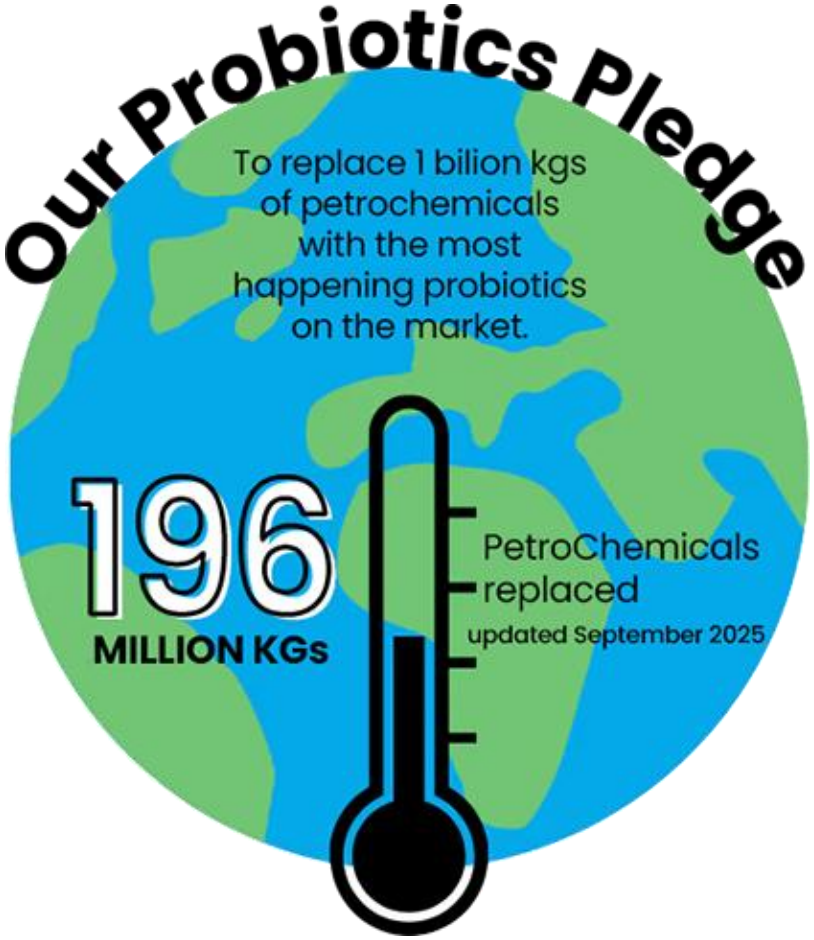
High demand for alternatives to conventional leather chemicals, that are cheaper, safer, and more environmentally friendly:

Good or better performance in the tannery: While reducing the ecological footprint, Proviera‘s products provide additional benefits when compared to other products

Vision

Until now, synthetic leather chemicals and solvents have been used to turn natural hides and skins into finished leather. Largely unchanged since the introduction of industrial leather making, this costly process depends on the crude oil industry and creates large amounts of waste, much of which could be reused if not for their chemical contamination.

Proviera is changing that. Our biochemicals are derived from probiotic cultures and fully renewable natural raw ingredients. They use biotechnology to naturally and effectively break down and process hides and skins for leather, helping tanners implement sustainable strategies by reducing the need for synthetic chemicals and adding value to tanning by-products.



LCA / results:

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Proviera has commissioned a specialist third-party company to carry out a study with the aim to evaluate the environmental performances of 3 products obtained through biological processes, meant to replace conventional chemicals used during the manufacture of leather, converting raw hides and skins from the meat industry into leather articles. Results:

CLIMATE CHANGE

WATER CONSUMPTION

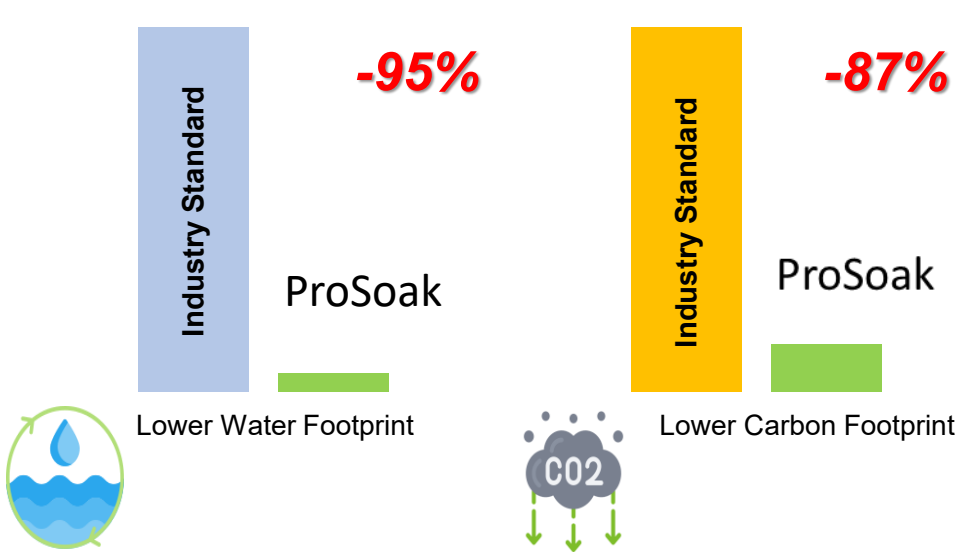
Category	Units	ProSoak	ProSpread	ProDegreaze
Global warming	KG CO_{2eq}./KG	0,293	0,365	0,331
Water scarcity	m^3_{eq}./KG	0,120	0,127	0,156

LCA / benefits:

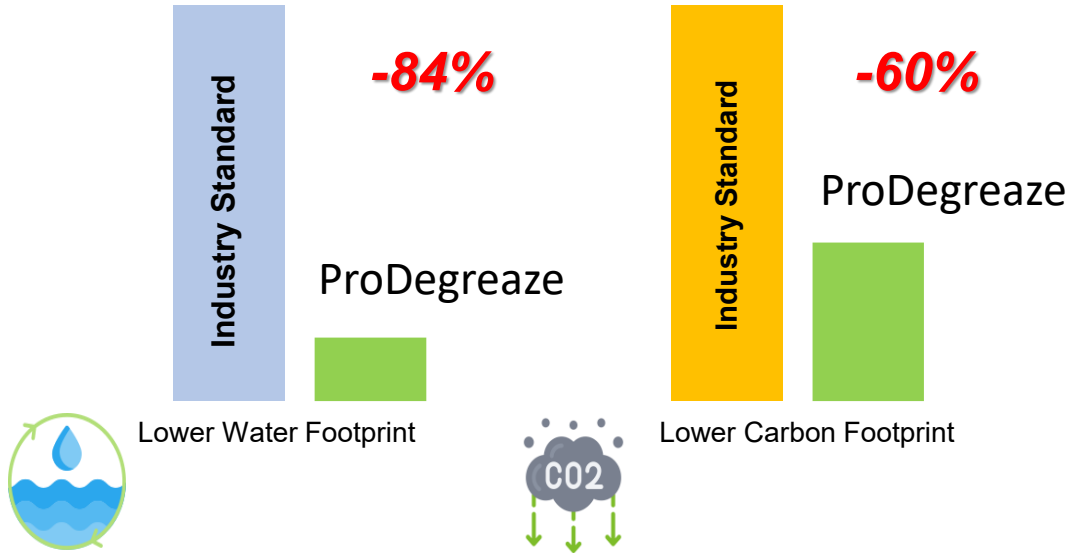
Reduced Environmental Footprint

Compared to standard products, Proviera‘s leather chemicals show a significantly reduced environmental footprint

Soaking Surfactants



Degreasing Agents



Carbon footprint: references

Proviera®
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1 KG Synthetic surfactant → 1.1 Kg CO_2 ↑

100 % biodegradable

Added to the atmosphere

1 KG Proviera → 8 g CO_2 ↑

100 % biodegradable

Not added to the atmosphere
In the natural carbon cycle

1,000 KG raw hides x 1% = 10 KG surfactant → 11 KG CO_2 ↑

emissions due surfactant biodegrading

Every 1,000 t Proviera →

345

30,000 Km/year
18,641 miles/year

1,000 tons of Proviera replacing petrochemical surfactant has similar carbon footprint like replacing 345 gasoline cars by e-cars