



TANIGAN®

# Opportunities and advantages with new liquid syntans

» Quality, sustainability, regulatory and other benefits



TFL – Great chemicals. Excellent advice.

TANIGAN®



# Ultra low to zero BPS / BPF liquid syntans



TFL is the world's top performing leather chemicals supplier, exclusively focused on, and dedicated to, natural leather!

TFL supports our tannery customers to success with environmentally sound solutions for their processes and products.

We are also proud to hold the number one spot in multiple sectors, including in wet end syntans. Many tanneries around the world have traditionally handled powder syntans. Today, liquid syntans are increasingly meeting the latest market needs.

Changing from powder syntans to liquid syntans offers many additional benefits besides meeting the latest regulatory challenges:

## Quality

- Less salt, giving better dye levelness and more stable fatliquoring, consistent waterproofing
- Easier and better chemical distribution in drums
- No risk of product "caking" over time

## Sustainability

- Lower energy consumption during manufacture, thus significantly lower CO<sub>2</sub> footprint
- Less salt resulting in reduced salinity in the wastewater treatment plant
- Reduced water, energy and chemical costs

## Health and safety

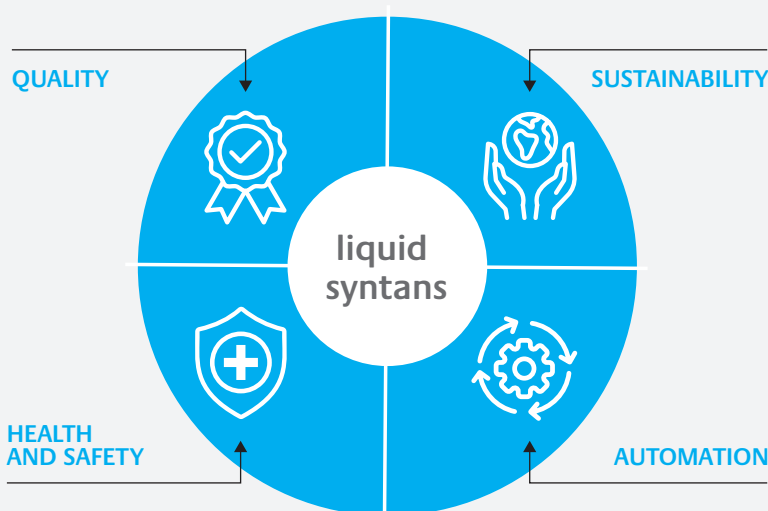
- No lifting of heavy bags or dust exposure
- No human contact to chemicals
- No waste / spillage of chemicals

## Automation

- Ideal for automatic metering and dosing systems
- Accurate dosing – perfect reproducibility
- No leather damage or reprocessing due to process errors

A number of low BPS and BPF liquid syntans are now available to meet the requirements not only of today but also those in the foreseeable future.

**Now is the time to make the change and reap the rewards available!**



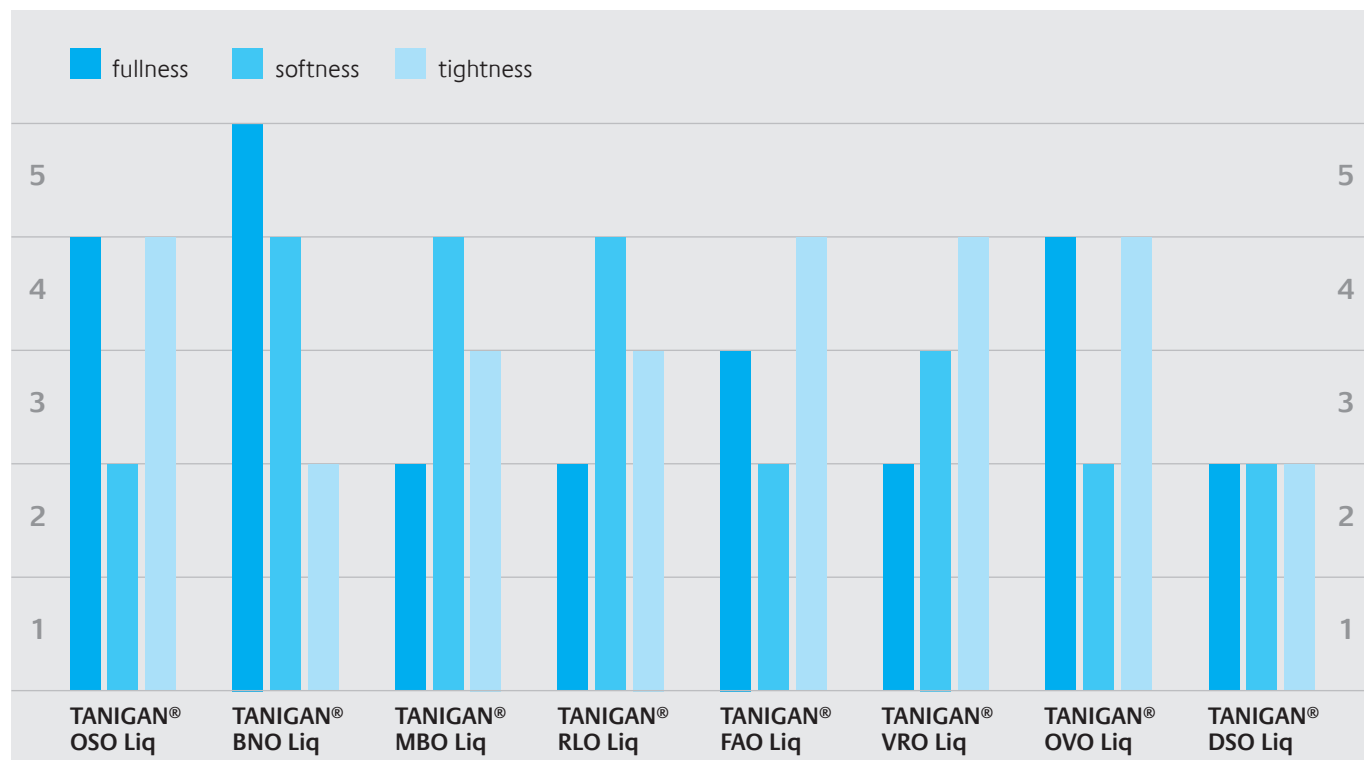
## The Properties

name	main focus	fullness	softness	tightness	color yield	light fastness	heat yellowing	BPS + BPF (in ppm)
TANIGAN® OSO Liq	well balanced for general purpose	4	2	4	3	Good	Good	n.d.
TANIGAN® BNO Liq	soft, round and full	5	4	2	3	Very good	Good	n.d.
TANIGAN® MBO Liq	tight with good tanning properties	2	4	3	4	Very good	Good	n.d.
TANIGAN® RLO Liq	high tanning power and whiteness	2	4	3	4	Very good	Good	n.d.
TANIGAN® FAO Liq	firm and tight grain articles	3	2	4	4	Moderate	Moderate	n.d.
TANIGAN® VRO Liq	tight and soft, ideal for milling	2	3	4	4	Good	Good	n.d.
TANIGAN® OVO Liq	ideal together with vegetable tannins	4	2	4	3	Good	Good	n.d.
TANIGAN® DSO Liq	firm, tight and dispersing	2	2	2	2	Moderate	Moderate	100

Dried product versions becoming available  
n.d. = NON-detectable

Key: 1 = low, 5 = high

## The key properties of fullness, softness and tightness at a glance



TFL's syntans remain an indispensable tool to attain key leather properties



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# Ultra low to zero BPS / BPF syntans

## The Product Introduction

### TANIGAN® OSO Liq

Universal replacement syntan for a wide range of applications with well-balanced properties including good fullness and tightness together with dispersing effect

- ultra-low residual monomer content, including free formaldehyde and BPS / BPF (not detectable)
- treated leather has a good degree of whiteness, light fastness and heat yellowing resistance

### TANIGAN® BNO Liq

The ideal replacement syntan for very soft and round leather with a high degree of filling and excellent tanning effect

- FREE of BPS / BPF
- ideal for milled leather

### TANIGAN® MBO Liq

The ideal replacement syntan for soft and tight leather, equally suitable for white and due to high colour yield also dyed leather with brilliant shades.

- ultra-low residual monomer content, including free formaldehyde and BPS / BPF (not detectable)
- It's tanning power makes it extremely suitable for pretanning, tanning and retanning of wet white and retanning wet blue
- very good light fastness and good heat yellowing resistance

### TANIGAN® FAO Liq

The ideal replacement syntan for firm, compact and tight leather articles

- ultra-low residual monomer content, including free formaldehyde and BPS / BPF (not detectable)
- 49 % bio-content
- highly suitable for retanning waterproof articles e.g., military or "American lifestyle" type

### TANIGAN® VRO Liq

The ideal replacement syntan for milled leather types combining a high degree of tightness and softness

- ultra-low residual monomer content, including free formaldehyde and BPS / BPF (not detectable)
- 24 % bio-content
- good fastness to light and heat yellowing resistance thus recommended for automotive articles

### TANIGAN® RLO Liq

The ideal replacement syntan with high tanning power for wet white and/or strong retanning effect

- ultra-low residual monomer content, including free formaldehyde and BPS / BPF (not detectable)
- good whiteness, suitable for white and pastel coloured leather
- very good light fastness and good heat yellowing resistance properties

### TANIGAN® OVO Liq

The ideal syntan to be used in vegetable tanning and retanning

- ultra-low residual monomer content, including free formaldehyde and BPS / BPF (not detectable)
- very good fullness and tightness making it highly recommended for quality vegetable tanned articles
- equally suitable to retanning wet blue leather especially when using vegetable tannins

### TANIGAN® DSO Liq

Syntan with pronounced dispersing properties applied in combination with other syntans and vegetable tannins

- very low residual monomer content, including free formaldehyde and BPS / BPF (<0.01 %)
- treated leather is firm, with a fine tight grain due to low astringency, with full round handle