



TANIGAN®

BPS / BPF optimized Syntans

» Addressing the very latest
regulatory challenges



TFL – Great chemicals. Excellent advice.

TANIGAN®



Ultra low to zero BPS / BPF syntans



The Background

TFL is a leading global manufacturer and supplier of high quality syntans that are recognized worldwide with the famous brand names of SELLATAN® and TANIGAN®.

To maintain this lead TFL continually invest in pioneering research, development and extensive application support to keep you at the cutting edge of the very latest technological advances.

ECHA has published the restriction draft on bisphenol A and other bisphenols of similar Concern (BPA and BosC; including BPS/BPF) and now the consultation phase begins for a minimum of 12 months. After finalization the restriction draft foresees that other (non-leather) industries using bisphenols will need to reduce BPA and BosC traces to 10 mg/kg or less within 18 months (2025 earliest) while leather will have an additional 5 years at 500 mg/kg or less (to 2030). There are a few points in the restriction draft that will need further clarification and TFL together with key partners will follow up on those topics and keep customers updated.

TFL, as a global leader in chemicals for leather production, had immediately started to develop products to address this new challenge once it became public. TFL has already launched an indispensable range of genuine syntans that enable customers to manufacture leathers that will comply to upcoming threshold of 500 mg/kg of bisphenols, all developed, manufactured and

strictly controlled within TFL's own facilities. This invaluable new range of syntans facilitate the production of the vast majority of leather articles and ensure the required leather properties and fastnesses are attained. This new range includes:

TANIGAN® BNO Liq, TANIGAN® LFO Liq, TANIGAN® RLO Liq, TANIGAN® DSO Liq, TANIGAN® FAO Liq, TANIGAN® VRO Liq and TANIGAN® MBO Liq.

Now we launch in addition TANIGAN® MB-O Liq with a combined BPS + BPF content of less than 20ppm, below the detection limit (not detectable). This "next generation" ultra-low bisphenol content replacement syntan can be used together with the above syntans in combination to achieve the leather properties and performance required and more easily stay within the restriction limit.

Thanks to this experience and competence TFL is particularly well positioned to continue successful research to ensure customers can also meet any future regulatory requirements with their processes and articles.

Please keep in mind that the vast majority of TFL's comprehensive wet end retanning products portfolio is completely free of BPS and BPF under the following well-known trade names: RETINGAN®, MAGNOPAL®, LEVOTAN®, BLANCOROL®, TANNESCO®, DRYWALK®, LEUKOTAN™, LUBRITAN™ (and most of SELLASOL®) of course along with all TFL fatliquors and dyestuffs etc.

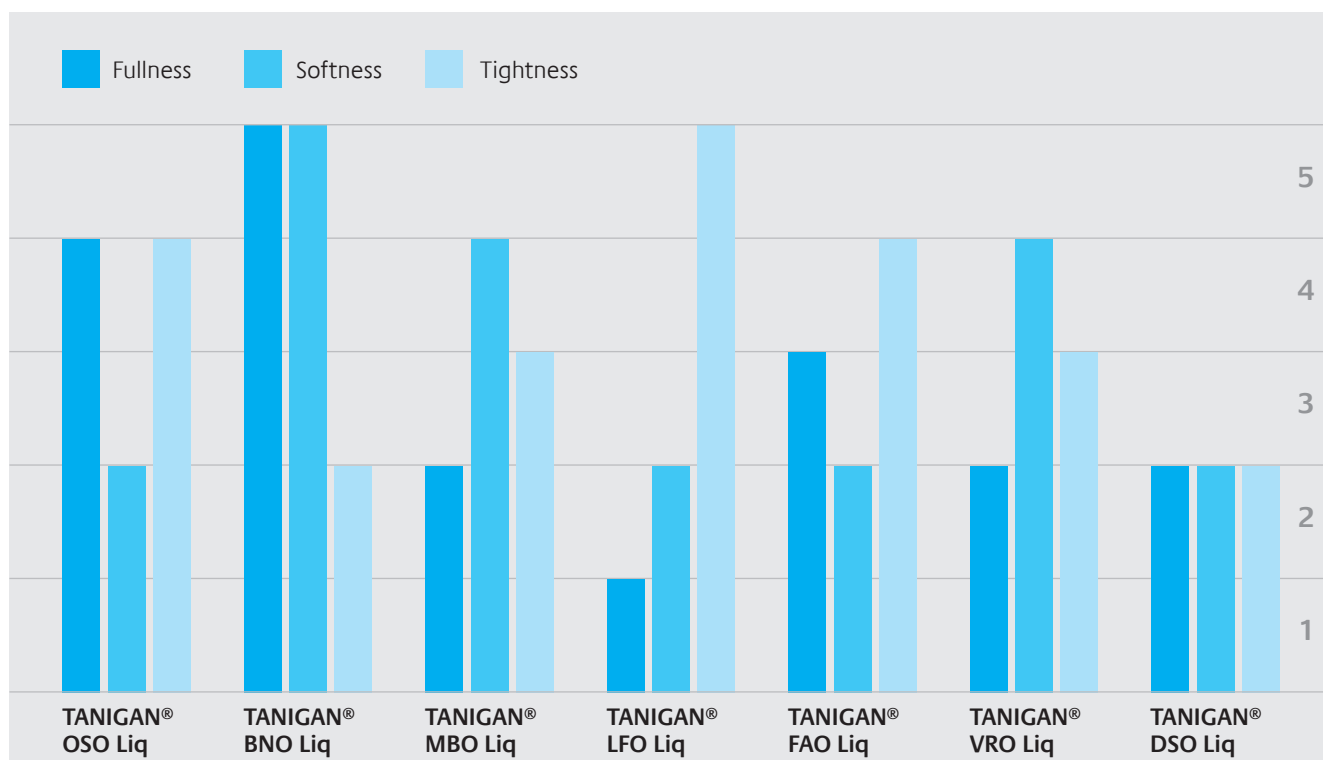
The Properties

Product 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	very soft, round and full	5	5	2	3	Very good	Moderate	FREE
TANIGAN® MBO Liq	tight with good tanning properties	2	4	3	4	Very good	Good	n.d.
TANIGAN® LFO Liq	tight, flat and smooth	1	2	5	4	Very good	Very 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	4	3	4	Good	Good	n.d.
TANIGAN® DSO Liq	firm, tight and dispersing	2	2	2	2	Moderate	Moderate	100

Dried product versions will become available shortly

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

TANIGAN®



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)
- Its 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® LFO Liq

The ideal syntan for very tight, flat “not plumped” smooth grain leather articles

- ultra-low residual monomer content, including free formaldehyde and BPS / BPF (not detectable)
- high degree of whiteness with very good light fastness and 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® 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