



solutions for leather

wide & innovative product range

innospec ▶

Innospec wide & innovative solutions for your leather

In a rapidly changing industry, innovation offers the opportunity to transform leather production the right way. Innospec provides a complete and high-tech line of products for this market.

Our solutions are suitable for three main processes:

- **Beamhouse and Tanning** (soaking auxiliaries, liming auxiliaries, surfactants and degreasing agents, deliming base, bating and enzymatic agent, basifying agents, chromium complexing agents, special auxiliaries).
- **Retanning** (surfactants and degreasing agents, neutralizing agents, dispersing syntans, special auxiliaries, fatliquors, synthetic tannins, retanning agents, mineral retanning agents, acrylic retanning agents);
- **Finishing** (impregnation resins, acrylic and polyurethanic resins, compact binders, fillers, water-based lacquers, special auxiliaries, waxes & oils).

We are always looking for technological innovations to offer our customers solutions and improvements in the performance of their products. In addition to the variety of products, we also offer a personalized service, meeting the real needs of each customer. We also have sustainability at heart: we develop solutions that reduce the environmental impact of leather production.



Innospec solutions for the beamhouse process

The **beamhouse process** is the transformation of pelts into wet blue leather. This process comprises the stages of soaking (skin rewetting), liming (hair removal), deliming (lime removal), bathing (removal of residual proteins and dirt), and finally tanning (wet blue leather). The correct choice of products for each process will result in a high-quality wet blue leather.

Soaking Agents		
Ingredient name	Description	Benefits
TANZYME R 1	Bacterial protease	▪ Excellent loosening of the bulb and hair removal ▪ Facilitates the opening of the fibers ▪ Facilitates skin hydration
UNICTAN R BAC	Full soaking agent with bactericidal effect	▪ High soaking power ▪ Substitute for all soaking aids and bactericide
Liming Auxiliaries		
Ingredient name	Description	Benefits
TANNAS ECO	Blend of amines and amides	▪ Gradual pH increase ▪ Facilitates fiber opening ▪ Improve open and clean hides ▪ Good area yield
TANNAS MDU 400	Amina liming	▪ Facilitates fiber opening ▪ Improve open and clean hides ▪ Improves degreasing
TANZYME C 2	Bacterial protease	▪ Improves smoothness and fiber opening ▪ Eliminates non-structural proteins ▪ Favors lime penetration in the pelts cut
Surfactants and Degreasing Agents		
Ingredient name	Description	Benefits
SOLVTAN EXTRA	Anionic and nonionic surfactant	▪ Excellent degreasing power ▪ APEO Free ▪ Concentrated product
SOLVTAN PÓ	Surfactant powder	▪ Facilitates grease and dirt removal ▪ Easy-to-handle powder product ▪ Freight and packaging costs reduction

Special Complexing Agents		
Ingredient name	Description	Benefits
TANPLEX FLS	Liquid chromium complexing	▪ High penetrating power in cutting ▪ Fast deliming ▪ Improves pickle and chromium penetration ▪ Improves wet-blue with standard colour ▪ Inhibits Chromium VI formation during the tanning
TANPLEX FLP*	Complexing Powder	▪ High penetrating power in cutting ▪ Fast deliming ▪ Nitrogen-Free ▪ Improves pickle and chromium penetration ▪ Improves wet-blue with standard colour ▪ Inhibits Chromium VI formation during the tanning ▪ Ease of process due to the product being powder
UNICTAN TC 400	Full Complexing	▪ Complexing that can replace process acids ▪ Uniform coloring of wet blue ▪ Greater filling and equalization of touch ▪ Improves grain strength and tightness ▪ Inhibits formation of Chromium VI during the process

*TANPLEX FLP: a better distribution of chromium in the tanning facilitates an improvement in the final color of the Wet Blue. Due to its efficient complexation action between chromium and the skin, TANPLEX FLP allows the addition of chromium sulfate even before the yellow color of the Bromocresol green indicator. This promotes a reduction in process time without compromising chromium penetration during tanning.

TANPLEX FLP with 3 – 4 hours process time (Bromocresol Green Indicator)



Standard process with formic acid and sulfuric acid with 5 to 6 hours process time (Bromocresol Green Indicator)

Deliming Base

Ingredient name	Description	Benefits
TANDESCAL BASE	Deliming agent based on acid hydrolysis salts and calcium complexing salts	▪ Gradual deliming ▪ Prevents pH shock ▪ Grain protection

Basifying Agents

Ingredient name	Description	Benefits
NEUTRAN BMF	Magnesium oxide basifying	▪ Slow and gradual basification ▪ Prevents rapid pH rise that can cause staining ▪ Uniform distribution of fixed chrome ▪ Process safety basifying

Auxiliaries

Ingredient name	Description	Benefits
UNICTAN D GEL*	Oxy-reducer for deliming and bating washing	▪ Promotes Process Safety as it reduces Sulfide odors and consequently possible formation of hydrogen sulfide gas, which is toxic and flammable ▪ Uniform and gradual deliming ▪ Reduces formaldehyde from retanning and fatliquor products
DESLITAN K 1	Slip agent.	▪ Reduces the risk of grain buffing effect ▪ Reduces stains and leather with uneven dyeing ▪ Reduces tearing issues
TANZYME P 10	Microbial trypsin enzyme for bating	▪ Increased elasticity ▪ Clean and uniform ▪ High standardization

* UNICTAN D GEL is an environmentally friendly solution for sulfide, chromium VI and formaldehyde residues in leather and contributes to process safety as a redox agent for pickling, tanning and retanning.

Innospec solutions for the retanning process

The **retanning process** is where we get characteristics such as softness, elasticity, color, grain appearance, and filling. This process is based on the set of technological excellences to build a leather with the highest quality standard.

Surfactants & Degreasing Agents

Ingredient name	Description	Benefits
SOLVTAN KM SN	Nitrogen-free anionic and nonionic surfactant	▪ Excellent degreasing power ▪ Soaking power ▪ APEO and Nitrogen Free ▪ Low foam

Neutralizing Agents

Ingredient name	Description	Benefits
NEUTRAN S	Liquid neutralizing phenolic	▪ Fast and deep neutralization ▪ Grain tightness ▪ Uniform dyeing ▪ Grain extremely thin
NEUTRAN P	Safety neutralizing salt and chrome complexing agent	▪ Fast and deep neutralization ▪ Buffer effect ▪ Excellent smooth, fine and extremely tight grains
TANCURT DN 100	Synthetic tannin with a neutralizing effect	▪ Facilitates dispersion of the tannins ▪ Uniformity of touch and dyeing

Dispersing Syntans

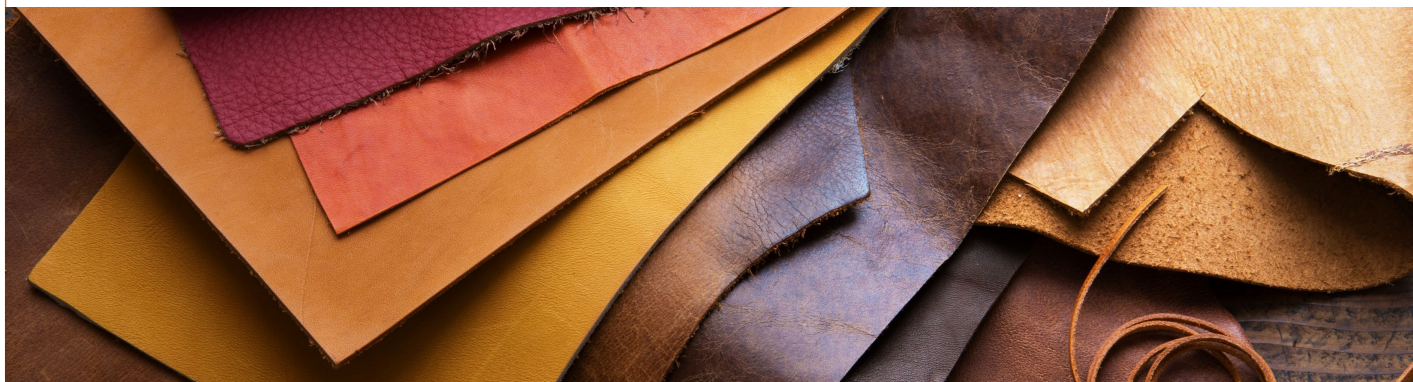
Ingredient name	Description	Benefits
TANCURT D 710	High molecular weight naphthalene dispersant	▪ Excellent dispersion of vegetable tannins and dyes ▪ Improve dye penetration ▪ Uniform touch ▪ Excellent levelness
TANCURT RT 404	High molecular weight naphthalene dispersant	▪ Excellent dispersion of vegetable tannins and dyes ▪ Improves dye penetration ▪ Uniform touch ▪ Excellent levelness
TANCURT NIIL	Phenolic dispersant	▪ Light shades dispersant ▪ Light fastness

Special Auxiliaries

Ingredient name	Description	Benefits
SILOFIO PROT 98	Natural polyamide	▪ Excellent interaction with leather protein and fixed chrome ▪ Excellent filling ▪ Touch equalization ▪ Grain tightness
TANHILF D 49	Dyeing retardant	▪ Favors dye penetration ▪ Excellent dye equalization and color uniformity throughout leather
TANCURT SOA 101	Synthetic tannin	▪ Contributes to uniformity and equalization of leathers even on low-grade leathers
TANZYME RE 523	Enzymatic Neutralizer	▪ Removal of residual proteins ▪ Removal of residual hyaluronic acid ▪ Improved dispersion of neutralizing agents, tannins and fatliquors ▪ Improved dyeing intensity ▪ Improved filling ▪ Improved softness

Phenolic Tannins

Ingredient name	Description	Benefits
TANCURT FE 54	Amphoteric Phenolic Tannin	▪ Uniform dyeing ▪ Excellent softness ▪ Can be used in pre-tanning processes
SULFONOL 3Q 85 M	Phenolic tannin	▪ Use in tanning and retanning of white leathers ▪ Excellent filling effect ▪ Excellent softness ▪ Light fastness



Fatliquors		
Ingredient name	Description	Benefits
TANSOFTY TK	Concentrated vegetal sulphited oil	- High degree of softness - Tight grain - Soft touch - Excellent stability
TANSOFTY AGS	Sulphated fat alcohol	- Use as pre-fatliquoring, main fatliquoring or in fatliquoring composition - Excellent light and heat fastness - Helps disperse grease oils - Excellent smoothness equalization
TANDERM SLC	Phosphoric ester and vegetable oil, in emulsion	- High degree of softness - Tight grain - Soft touch - Excellent stability
TANSOFTY UP	High concentrate lecithin-based oil	
TANSOFTY HSP	High penetrating polymer fatliquor	- High degree of softness - Silky touch - Excellent filling - Grain tightness - Excellent exhaustion - Excellent stability
TANDERM CTSN	Crude oil	- Excellent light fastness - Improved physical resistance in full veg tanned leather
TANDERLM LFA	Concentrated sulfated oil	- Used for shoe-upper and soft with tight grains articles - Improves physical resistance - Uniform dyeing
TIMBERTAN PWR	Sulphated vegetable oil	- High degree of softness - Tight grain - Physical resistance - Excellent stability - Uniform dyeing

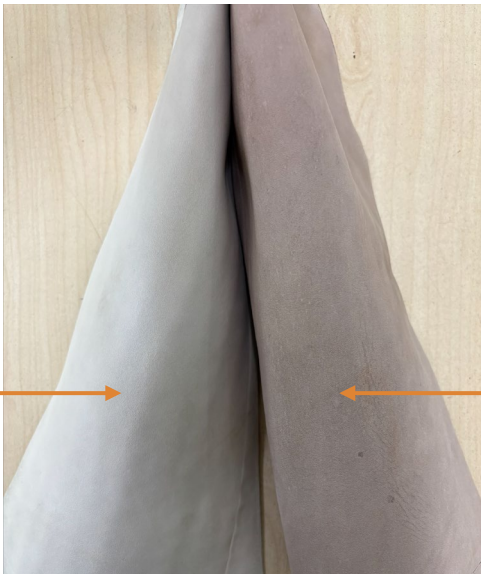


Retanning Tannins		
Ingredient name	Description	Benefits
TANCURT DV 700	Acid-dispersing retanning tannin	▪ Grain tightness ▪ Grain smoothness ▪ Used for nubuck and shoe upper nappa
TANCURT M 507	Melamine-based tannin	▪ Grain tightness ▪ Grain smoothness ▪ Grain equalization
SILOFIO NVG	Protein vegetable tannin	▪ Excellent filling effect ▪ Grain tightness ▪ Bio-based ▪ Excellent light resistance

SILOFIO NVG: Bio-based protein vegetable tannin with 32% tanning power. It can totally or partially replace acacia tannin, depending on the article, and maintain the same characteristics and benefits, but with significant process cost reduction.



Retanning with SILOFIO NVG
(Protein vegetable tannin)



Retanning with
Acacia Tannin
(Polyphenols)

Mineral Retanning Agents		
Ingredient name	Description	Benefits
TANCURT C 20	Mineral retanning	▪ Excellent exhaustion of tannins, dye and fatliquors, and consequently improves the treatability of effluent treatment ▪ Favors softness ▪ Favors dyeing intensity

Acrylics Retanning Agents		
Ingredient name	Description	Benefits
TANCURT PAP	Protein Acrylic polymer	▪ Excellent filling ▪ Grain tightness ▪ Light fastness ▪ Round and silky touch
TANCURT 427	Soft acrylic resin	▪ High degree of filling ▪ Excellent softness ▪ Light fastness ▪ Versatility of use, from neutralization to fatliquoring ▪ High complexing power of chromium
RESIN ACR 321	Hybrid acrylic/vinyl polymer	▪ Provides lowering the fibers ▪ Indicated for use for bonded-leather



Innospec solutions for the finishing process

The **finishing** is the final process of leather manufacture. In this process, the characteristics of visual, touch, brightness, embossing, protection and resistance are attributed. The characteristics of each leather article depend on the correct choice of products with very high application performance and quality standards.

Impregnation Resin		
Ingredient name	Description	Benefits
RESIN RI 520	Impregnation resin for full grain leathers	▪ Grain tightness ▪ Maintains leather color ▪ Not change the original touch
RESIN RI 560	Impregnation resin for buffed leathers	▪ Grain tightness ▪ Maintains leather color ▪ Not change the original touch ▪ Excellent mechanical strength
Finishing Resins		
Ingredient name	Description	Benefits
RESIN ACR 301	Acrylic microbinder resin	▪ Soft film ▪ Good elasticity ▪ Enhances the naturalness of leather
RESIN ACR 194	Acrylic resin, medium/soft touch	▪ Medium softness film ▪ Good elasticity ▪ Memory effect and embossing retention ▪ Low tack ▪ Excellent water resistance
RESIN ACR 1040 J	Acrylic resin, medium/hard touch	▪ Good elasticity ▪ Memory effect and embossing retention ▪ Low tack ▪ Excellent water resistance

Compact Finishing Products

Ingredient name	Description	Benefits
FONDO CO 521	Compact binder for universal use	▪ Compact for aftermarket car seats, furniture and splits ▪ Excellent covering and closing power ▪ Excellent embossing retention ▪ Low tack ▪ Excellent physical resistance
FONDO CS 400	Acrylic binder, medium / soft film	▪ Excellent coverage and closure ▪ Excellent embossing retention ▪ High resistance in physical tests
FONDO AM 30	Compact product for buffed leather	▪ High degree of matting ▪ Excellent embossing retention ▪ Physical and mechanical strength

Water-Based Lacquers

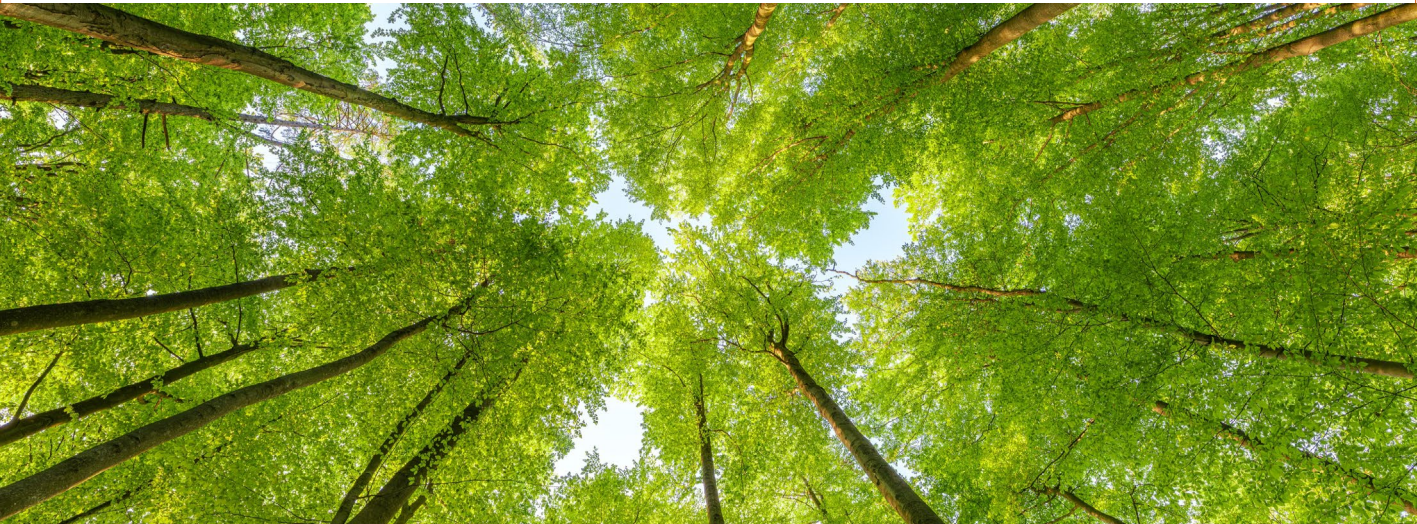
Ingredient name	Description	Benefits
TOPCELL VOC FREE	Matte hybrid acrylic / nitrocellulose polymer	▪ VOC Free ▪ Biodegradable ▪ Non-toxic ▪ Matte effect
TOPCELL GLOSS	Gloss hybrid acrylic / nitrocellulose polymer	▪ VOC Free ▪ Biodegradable ▪ Non-toxic ▪ Shine effect
AERFIX RB 05	Polyurethane top coat with rubberized touch effect	▪ Polyurethane with Soft Touch effect
AERFIX 2707	Polyurethane top coat – high gloss and transparency	▪ Good light fastness. ▪ Used alone or in composition with other finishing products
AERFIX VR 2040	Water patent, soft and pleasant hand	▪ High gloss ▪ High physical strength
AERFIX HB 2900	Water-based top coat PU acrylic, high gloss	▪ High physical and chemical resistance, such as alcohol, solvents, alkalis, among others ▪ VOC Free
AERFIX HB 2920	Water-based top coat PU acrylic, matte	
AERFIX 3002	Matte polyurethane top coat	▪ High physical resistance ▪ Pleasant touch ▪ No repolishable effect

Special Auxiliaries		
Ingredient name	Description	Benefits
FONDO 910 PRÉ	Blend of acrylic/polyurethane binder used as pre-base coat	▪ Excellent embossing effect ▪ Does not require buffer after application ▪ Does not interfere with touch ▪ Excellent coverage
RESIN NB 42	Compound of acrylic resin and special agents	▪ Excellent power of intensity and fixation ▪ Indicated for nubuck correction
AERFIX ST 04	Polyurethane topcoat, medium gloss effect.	▪ Silky touch ▪ Can be used in base coats as well in water-based topcoats
REOSIL PA 26	Water-based hand modifier agent	▪ Silky touch ▪ Improvement in physical results
TANCROSS AF 100	Impregnation Process Aid	▪ Suitable for impregnation ▪ Low foaming paint compositions
WAX PL 1303	Blend of synthetic and natural waxes	▪ Natural burning effect ▪ Glossy after brushing ▪ Low stickiness ▪ Good matting ▪ Good pigment hold



All these ingredients are available in South America only.

Waxes and Oils		
Ingredient name	Description	Benefits
WAX FA 22	Synthetic wax emulsion	▪ Natural brightness ▪ Low tack ▪ Ease of stacking the leather ▪ Improved embossing ▪ Can be used in the pre-base or in the composition of the base coats
WAX RP 28	Polyethylene wax	▪ Repolishable effect ▪ Excellent paint coverage and closure ▪ High darkening effect
WAX CE 160	Medium/hard paraffin	▪ High darkening effect ▪ Burning Effect
TIMBERTAN 1009	Blend of synthetic and natural oils and waxes	▪ High darkening effect ▪ Pleasant touch
TIMBERTAN OP 500	Blend of solvent-based natural oils and waxes	▪ Pleasant touch ▪ High degree of darkening ▪ Covers natural defects ▪ Maintains the natural color of the article
TIMBERTAN W 82	Blend of solvent-based natural and synthetic oils	▪ Wet touch and medium waxy ▪ High degree of darkening ▪ Covers natural defects ▪ Maintains the natural color of the article



Sustainability at Innospec



As a member of the **Roundtable on Sustainable Palm Oil (RSPO)** since 2013, we have a long-term commitment to the responsible sourcing of palm-based raw materials. Our **Sustainable Sourcing of Palm Oil and Palm Kernel Oil Derivatives Policy** defines our commitments and the specific steps we are taking towards ensuring that our products are produced only from sustainable palm sources that comply with the **NDPE (no Deforestation, no Peat, no Exploitation)** principles. All our facilities that handle palm-based materials are RSPO mass balance (MB) supply chain certified. We are therefore able to supply our customers with RSPO MB certified products on request. We continue to support and encourage the sale of RSPO certified products to our customers.

We have been members of **Action for Sustainable Derivatives (ASD)** since 2020. The collaborative initiative aims to use a harmonized approach to supply chain transparency, risk monitoring and engagement efforts to improve practices. It is facilitated by **Business for Social Responsibility (BSR) and Transitions**, two organizations with expertise in the field of supply chain sustainability. With 31 member companies, the industry led group brings together like-minded companies to collectively tackle supply chain issues around palm oil and palm kernel oil derivatives and uphold the NDPE principles, respect human rights and support local livelihoods.



ASD
ACTION FOR SUSTAINABLE DERIVATIVES



We have been awarded the **EcoVadis Gold Medal** for our sustainability management system and performance. Achieving Gold puts Innospec in the top 7% of all companies rated in our sector globally. EcoVadis is a **Corporate Social Responsibility (CSR)** platform for business sustainability assessment. It independently evaluates and benchmarks the sustainability performance of over 100,000 companies in 175 different countries and 200 industries, for their environmental, labor, fair business practices and sustainable procurement.



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