



PULCRA
NATURALIS®

Naturalis® Product Range

Pulcra Chemicals
The solution specialist

SPECIALTY CHEMICALS FOR APPLICATIONS
IN THE **TEXTILE, FIBER AND LEATHER** INDUSTRIES



TEXTILE



FIBER



LEATHER

Pulcra Chemicals is a global company with outstanding engineering capabilities and unique processing knowledge. We look back on over 140 years of experience in the production of innovative specialty chemicals for the fiber, textile and leather industries.

Our goal is the success of our customers, whom we support in the best possible way in product development, legal compliance and sustainability.

INNOVATION FOR A **SUSTAINABLE FUTURE**

Sustainability is an important part of Pulcra Chemicals' philosophy and commitment. We aim to increase the productivity and environmental compatibility of complex manufacturing processes in the fiber, textile and leather industries. This means that we take into account regulatory requirements in key target markets as well as trends in health, safety, environmental sustainability and innovation.

Together with our social commitment and the continuous development and training of our employees, this approach is key to our philosophy of sustainable development. Pulcra Chemicals' product line fully complies with the latest European requirements on chemicals (REACH) and other regulatory requirements.

We register our products according to textile eco-standards and criteria, including OEKO-TEX®, GOTS and bluesign®. As part of our sustainability approach, we are committed to Zero Discharge of Hazardous Chemicals (ZDHC) and meet key requirements to keep production safe and clean with our chemicals.





PULCRA NATURALIS® – THE BIO-REVOLUTION FOR LEATHER PROCESSING

Since many years, Pulcra has a strong expertise in producing top-quality leather chemicals based with an exceptionally high portion of renewable feedstock. Signature products of Pulcra like Peramit ML-N, Grassan PA, Sirial TIS MF or Drasil 608 contain more than 90% of renewable carbon in their formulation and have been used by generations of tanners. Now, Pulcra has launched the game changing initiative Pulcra Naturalis® which is focusing on the promotion of a product portfolio with a high content of bio-based carbon. All products grouped in this new portfolio contain at least 80% of renewable carbon¹.

WHY RENEWABLE CARBON?

The use of renewable feedstock is an important means for reducing the greenhouse gas emissions associated with the production of chemicals, and an important step towards carbon neutrality. A major part of embedded carbon in industrial or consumer goods, including leather or leather chemicals, eventually finds its way to the atmosphere as CO₂. When working with fossil feedstock, the carbon used was bound in the earth, its release thus implies a strongly negative carbon balance. Renewable raw materials based on vegetable or animal feedstock have a much better carbon footprint: plants are binding CO₂ from the atmosphere, and livestock is fed on a natural diet. Thus, by changing to renewable raw materials, the inflow of CO₂ is stopped.

WHAT TYPE OF RAW MATERIALS AND PRODUCTS ARE INVOLVED IN PULCRA NATURALIS® PRODUCTS?

Natural oils are the bases for emulsifiers and fatliquors, which are used to clean, degrease or soften the leathers. The know-how of Pulcra Naturalis® is basically that the processing is done by conversion with carbon free or low-carbon components, so that the final product retains an unmatched biobased carbon content. Also, high-tech degreasing agents synthesized only with sugar and oil are a very good example that excellent performance and 100% renewable carbon can go hand in hand. Retanning agents containing amylose, cellulose or lignin components as well as products based on functionalized proteins are another example of how outstanding leather properties can be obtained with a purely natural products.

FOR WHAT APPLICATIONS PULCRA NATURALIS® PRODUCTS CAN BE USED?

The new portfolio is extensive and can be used for almost all types of leathers and furs. This involves low-emission car upholstery products, shoe uppers, garment leathers as well as the treatment of fine furs. Special focus is also given to alternative tanning materials, with the natural zeolite tanning materials for bovine hides and sheep skins.

Pulcra Naturalis® is an important element in the Pulcra initiative to reduce the carbon footprint of the production of high-quality leather chemicals. Apart from the mere source of carbon also the energy for processing is reduced and optimized with regard to the output of CO₂. The sourcing of raw materials is done in clusters of providers and partners in close vicinity to our local production plants over the globe. We are convinced that a contribution to prevent climate change and biodiversity loss needs to be done now, and this can only be achieved together with our suppliers and customers. Finally, the best promotion for the utterly sustainable material natural leather is to further reduce its environmental impact.

¹ The content of bio-based carbon is determined by DIN EN 17035.

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SYMBOL DEFINITIONS

  N Charge: anionic, cationic, amphoteric/bi-ionic & non-ionic





 BioC content > 80% Pulcra Naturalis® Product

 BioC content > 60%

 Heat yellowing 400h 100°C > 4. Usage amount: 5% for tanning/retanning

BEAMHOUSE














PRODUCT NAME	DESCRIPTION	PULCRA NATURALIS®	CHARGE
FORYL® S NATUR	100% bio-based non-ionic wetting and degreasing agent.		N
FORYL® X NATUR	Non-ionic wetting and degreasing agent powered by Pulcra extended technology. Excellent efficiency combined with high bio-based C content.		N
PERAMIT® ML-N	Fully bio-based anionic wetting agent. Superior cleanliness and soaking efficiency. Excellent wool-washing efficiency.		⊖
PERDOL® ULTRA ECO	Soaking and liming auxilliary with emulsiffying and cleaning properties. Cleaner and flatter pelts with less wrinkles. Recommended also as rewetting agent for old and dried out wet blue.		N

PULCRA NATUR TANNING®







PRODUCT NAME	DESCRIPTION	PULCRA NATURALIS®	CHARGE	WHITENESS
CORATYL® G	Natural zeolithe for tanning and retanning. Used in combination with other tanning agents	n.a.	N	
CORATYL® GCA	Masked zeolite for improved softness and penetration.		N	
DRASIL® CA NATUR	Combination of light mineral tanning and natural substances for soft tanning types for Pure Natur Leathers.		N	
DRASIL® HFG NATUR	Natural tanning agents for combination tannage of Pure Natur Leathers.		N	
DRASIL® M10 NATUR	Functional bio-polymer for all Pulcra Natur Tanning® processes. Gives softness and body, flexibility in all dimensions.		N	
CORATYL® SI	Auxiliary for Pulcra Natur Tanning®. Improves penetration, fixation and uptake of aluminum tanning agents, resulting in a higher shrinking temperature.		n.a.	

RETANNING-FILLING

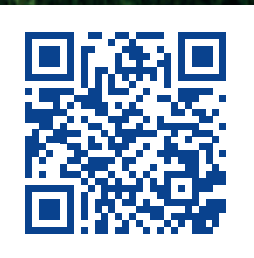
PRODUCT NAME	DESCRIPTION	PULCRA NATURALIS®	CHARGE	WHITENESS
DRASIL® AL NEW	Tanning agent based on aluminiumsulfate. Suited for the white tannage and in the retannage of chrome leathers. Suitable for fixation of dyes and hydrophobing agents.		⊕	
DRASIL® EN NATUR	Tightness improving filling agent to be used in retannage or fatliquoring. Selective filling action for the poorer, looser parts. Economic due to low usage amount.		⊖	
DRASIL® FFD	Formaldehyde free resin, with a fine, tight grain and good fullness especially in bellies and flanks. Good buffability and embossability.		N	
DRASIL® FJ NEW	Protein filling agent for superior fullness, including in looser parts.		N	
DRASIL® F NATUR	Fully bio-based filler for soft and full leathers with fine grain.		N	
DRASIL® L NATUR	Retanning and dispersing agent based on bleached lignin-sulfonate, for good fullness and grain tightness. Helps in penetration of dyestuff, improves uniformity.		⊖	
SLIPTAN D-48	Universal slip agent. Fully inert, natural formula. Knotting, entanglement and tearing of leathers is prvented, rub marks are reduced. Also remmended for short float.		N	



FATLIQUORING

PRODUCT NAME	DESCRIPTION	PULCRA NATURALIS®	CHARGE
PERAMIT® LSN-N	Combination product optimized for maximum improvement of tear strength.		⊖
PERAMIT® LSW NEW	Improves tear strength and stabilizes unstable fatliquor mixtures.		⊖
SIRIAL® A NATUR	Main auto fatliquor with 98% of bio-based C content. Softness, fullness. Renewable material with good fastnesses, suitable for use in pickling.		⊖
SIRIAL® AVB	Renders leather with a tight grain, a smooth touch, and a fine mill grain pattern.Product based on renewable vegetable oils and is applicable on chrome and chrome free leathers.		⊖
SIRIAL® AVF	Applied as main fatliquor on soft leather types, on chrome as well as on chrome free leathers. Tight grain, good filling properties, smooth touch and a fine mill grain pattern. Based on sustainable, vegetable oils.		⊖
SIRIAL® B NATUR	Main fatliquor for soft leather types, including upholstery leathers, garment and soft shoe-uppers. Excellent feel and uniformity. 98% of bio-based C.		⊖
SIRIAL® ELS NEW	Lecithin based leather fatliquor which renders great softness and a waxy feel. Particularly suited for the fatliquoring of chrome free leathers. In addition, Sirial ELS new is characterized by good light fastness and heat yellowing values and it improves glossiness and brightness.		⊖

PRODUCT NAME	DESCRIPTION	PULCRA NATURALIS®	CHARGE
SIRIAL® ELV NATUR	Lecithin based fatliquor which renders great softness and a waxy feel. Suitable for the fatliquoring of vegetable, synthetic tanned and retanned leathers. Improves tear strength and the brilliance of the dyeing.		⊖
SIRIAL® NFO NATUR	High-quality lanoline based kicking oil, fully free of mineral oil. Excellent softness of hair. Also suitable as touch enhancer in any kind of leather.		N
SIRIAL® RKL	Water insoluble neutral oil for a better fullness and handle. 100% natural		N
SIRIAL® TIS MF NATUR	Main fatliquor for all kinds of automotive, garment and upholstery leathers. Excellent softness, full, round handle, and good physical fastnesses.		⊖
SIRIAL® TIS MF3	Main fatliquor suitable for all soft leather types including car upholstery leathers. Sirial TIS MF 3 also has excellent fogging values.		⊖
SIRIAL® TIS NATUR	Economic bio-based fish oil fatliquor for high softness and uniformity. Fully free of mineral oil. Suitable for all types of leather, including car-upholstery leathers.		⊖
SIRIAL® TLK	Main Fatliquor for soft leather types. Fish oil free. Good softness, tight and fine grain, full round handle.		⊖
SIRIAL® TLL	Fish oil free fatliquoring agent for the production of upholstery automotive, garment and suede leathers and double face, having a positiv effect on the firmness and fineness of the grain. Renders an excellent dye intensity with a full, round and velvety handle.		⊖
SIRIAL® TLM	Fish oil free main fatliquor for the production of chrome and chrome- free upholstery, automotive and garment leathers and suedes. Since the product contains some lecithin, it produces very full leathers with a round, pleasant handle and brilliant dyeings.		⊖
SIRIAL® U NATUR	Bio-based fatliquor for shoe-upper leathers. Excellent ratio of softness and grain tightness.		⊖



PULCRA
NATURALIS

New sustainable line of leather
chemicals with maximum content
of bio-based carbon.

Bring **nature** into your leathers!

www.pulcra-leather-sustainability.com

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The indications given herein correspond to practical experiences. Owing to the differences in local conditions they cannot claim to be complete, so that any liabilities – also with a view to claims of third parties – are excluded. NaturalisProductRange-16-A4-12-22-EN



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