

# QUALITY PROTECTS.



**Your trusted partner for safe, sustainable and effective Personal Care formulations**

Explore preservative and multifunctional ingredients from LANXESS – solutions that protect and enhance cosmetic formulations to satisfy consumer demands.

**QUALITY WORKS.**

**LANXESS**  
Energizing Chemistry

# LANXESS AT A GLANCE

LANXESS is a leading specialty chemicals company based in Cologne, Germany, that is well-established on the global market. The core business is the development, manufacturing and marketing of chemical intermediates, additives and consumer protection products for a broad range of applications and markets.

We understand the growing importance of **providing safe and sustainable solutions to protect consumers and their environment**. The challenges that our customers face drive us to supply them with innovative, high-quality ingredients, as well as to provide them with extensive technical and regulatory advice. We are committed to sustainability and aim to achieve climate neutrality by 2040 (scope 1 and 2) and a net zero value chain by 2050 (scope 3).





# YOUR PARTNER FOR PRESERVATION SOLUTIONS

## A diverse portfolio of safe and effective ingredients

- Broad range of preservation solutions and other cosmetic ingredients to meet your specific formulation requirements
- Portfolio ranging from traditional technologies to innovative, sustainable offerings
- Naturally derived and nature-identical preservation solutions to suit consumer products with clean and green labels
- High-quality production standards, confirmed by certificates such as FSSC 22000

Our main focus is on **safe and effective preservation solutions** to protect Personal Care formulations against the hazards of microbial contamination. They can be applied in leave-on and rinse-off applications – LANXESS preservatives can be found in many recognized cosmetic brand products. LANXESS is one of the world's leading suppliers of benzoates and phenoxyethanol.

Our range of **multifunctional and other Personal Care ingredients** add value to your product formulations. From surfactants and humectants to synergists, using LANXESS multifunctionals can reduce the number of ingredients in a formulation while delivering superior product performance. Other ingredients in our portfolio include emollients for excellent skin feel or actives for denture cleansing.



## Reliable partnership beyond the product

We assist you in creating formulations that stay ahead of consumer trends and shifting regulations. This includes optimizing individual formulations for robustness or labelling as specified by varying local requirements.

Benefit from

- The broad technical, microbiology and regulatory know-how of our LANXESS experts
- Our global network of excellently equipped R&D facilities

With production sites across all continents, LANXESS owns an efficient and safe supply network to serve you globally.



# OUR BRANDS

Brands offered by LANXESS are trusted by manufacturers around the world because they provide assurance of superior purity, safety, and reliability. Among our key brands are **Kathon<sup>®</sup>**, **Neolone<sup>®</sup>**, **Purolan<sup>®</sup>**, **Purox<sup>®</sup>** and **Solbrol<sup>®</sup>**.

## OUR PRODUCT HIGHLIGHTS FOR PERSONAL CARE FORMULATIONS

### Neolone<sup>®</sup> BioG Preservative

#### Ethyl lauroyl arginate HCl

Neolone<sup>®</sup> BioG Preservative is based on Ethyl Lauroyl Arginate HCl which is derived from natural ingredients. It provides excellent broad spectrum activity against a wide range of gram-negative and gram-positive bacteria, yeasts and molds. Most stable between pH 3 and 6, it demonstrates optimum performance in Personal Care products with a low anionic content. Neolone<sup>®</sup> BioG Preservative is non-irritating and non-sensitizing at recommended use levels.

### Neolone<sup>®</sup> PH 100 Preservative

#### Phenoxyethanol

Neolone<sup>®</sup> PH 100 Preservative is a broad-spectrum antimicrobial for safeguarding cosmetic and personal care items, from shampoos to baby-care products. It is the highest purity standard phenoxyethanol with Cosmetic ingredient GMP level quality and global regulatory approval. The Neolone<sup>®</sup> PH 100 Preservative offers excellent stability across various pH and temperature conditions, effectively controlling a wide array of bacteria. It is rated safe by CIR and SCCS, allowing up to 1 % use in all personal care products.

### Kathon<sup>®</sup> CG Preservative

#### CMIT/MIT

Kathon<sup>®</sup> CG Preservative delivers superior, broad-spectrum protection for rinse-off hair and skin care items. It effectively combats bacteria, yeasts, and molds within the standard pH range of cosmetic products. It provides an excellent environmental profile, breaking down quickly, and without bioaccumulation or environmental persistence. Personal Care products remain free from any color or odor transfer. Its effectiveness at low use levels makes it a cost-attractive solution.

### Purox<sup>®</sup> S

#### Sodium benzoate

With a minimum purity of 99.9%, Purox<sup>®</sup> S is the highest purity offering for sodium benzoate available on the market. It provides broad spectrum protection alone, and can easily be used in combination with other preservatives and multifunctionals to create a robust Personal Care formulation up to pH 6.5. Based on renewable feedstock, Purox<sup>®</sup> S Scopeblue<sup>®</sup> is the first choice for customers looking for sodium benzoate with a measurably improved carbon footprint.

### Kalama<sup>®</sup> Benzyl Alcohol NF/FCC

Kalama<sup>®</sup> Benzyl Alcohol NF/FCC is produced to a very high minimum purity of 99.9%. Benzyl alcohol acts as a preservative, fragrance fixative, and solvent. It demonstrates synergies with sodium benzoate, enabling formulators to enhance preservation robustness by using these ingredients together. LANXESS also offers a parenteral grade for the most exacting requirements in pharmaceutical applications.

### Purolan<sup>®</sup> Isoparaffins

Purolan<sup>®</sup> IHD and Purolan<sup>®</sup> IDD isoparaffins are high purity hydrocarbon emollients with precisely defined chain length, low odor, and non-comedogenic properties. They are suitable for a wide range of cosmetic applications. Purolan<sup>®</sup> isoparaffins significantly improve skin feel and spreadability of creams and lotions, acting as conditioners and moisturizers in hair care applications. In fast drying formulations like mascara, isoparaffins are perfect solvents due to their high volatility.

 Available as Scopeblue<sup>®</sup> variant

# DRIVING SOLUTIONS FOR A SUSTAINABLE TOMORROW

As a responsible supplier, LANXESS is driving leadership in sustainability. As one of our key initiatives, we aim to be climate neutral in 2040 and to achieve a net zero value chain by 2050. LANXESS is listed in the leading sustainability indices of the Dow Jones Sustainability Index (DJSI World and Europe). Our activities were also awarded a “Platinum” rating by EcoVadis in 2023.

LANXESS specifically supports Personal Care manufacturers in achieving their own sustainability goals: Our portfolio includes ingredients that are approved for use in green label programs such as Ecocert, RSPO, NATRUE, Nordic Swan and COSMOS.

Some of those products are derived from natural raw materials such as sugar beet, and thus help you meet customers' expectations for sustainable end products. Others are renewable mass balance product alternatives: Through the use of a bio-circular feedstock, biomass and green electricity, they enable manufacturers to reduce their carbon footprint along the entire value chain. This helps you to implement your climate protection and energy efficiency targets. Many of the LANXESS production sites are ISCC Plus certified. Verified product carbon footprint calculations assess the CO<sub>2</sub> saving per product.

Talk to LANXESS application chemists who will support you on your individual path to sustainability.







## THE LANXESS SCOPEBLUE® LABEL

The **LANXESS Scopeblue® label** identifies products that either contain at least 50% sustainable raw materials or have a carbon footprint that is at least 50% lower than that of conventional products.

The LANXESS Scopeblue® portfolio for Personal Care formulations:

- **Neolone® BioG Preservative** meets both Scopeblue® requirements thanks to its sustainable raw material content exceeding 50% and its comparatively low carbon footprint.
- **Purox® S, Purox B® Food/Pharma and Purox® BA** Scopeblue® provide a measurably improved CO<sub>2</sub> footprint. The technical product properties remain unchanged, so no re-formulation is necessary when switching to the Scopeblue® alternative.

## Preservation Solutions

Name	INCI	Properties	Application Examples						
			Form	Typical %	pH range	Leave-On Skin Care	Rinse-Off Skin Care	Wipes	*Oral Care
<b>Purox® B Food/Pharma</b> 	Benzoic acid	Grains	0.1 – 0.5	2 – 6.5	■	■	■	■	
<b>Kalama® Benzyl Alcohol NF/FCC</b>	Benzyl alcohol	Liquid	0.1 – 1	3 – 8.5	■	■	■	■	■
<b>Purolan® BA</b> 	Benzyl alcohol	Liquid	0.1 – 1	3 – 8.5	■	■	■	■	■
<b>Bioban® Bronopol PC30</b>	Bronopol	Liquid	0.03 – 0.3	3 – 8	■	■			
<b>Bioban® Bronopol PC</b>	Bronopol	Crystalline solid	0.01 – 0.1	3 – 8	■	■			
<b>Neolone® BioG Preservative</b> 	Ethyl lauroyl arginate HCl/glycerin	Liquid	0.25 – 2	3 – 6	■	■	■	■	■
<b>Neolone® 950 Preservative</b>	Methylisothiazolinone	Liquid	< 0.015	2 – 12		■			
<b>Kathon® CG Preservative</b>	Methylchloroisothiazolinone / Methylisothiazolinone	Liquid	0.05 – 0.1	< 8.5		■			
<b>Neolone® PH 100 Preservative</b>	Phenoxyethanol	Liquid	0.3 – 1	3 – 10	■	■	■	■	■
<b>Purolan® PE</b>	Phenoxyethanol	Liquid	0.3 – 1	3 – 10	■	■	■		■
<b>Solbrol® PEH</b>	Phenoxyethanol/ Ethylhexylglycerin	Liquid	0.5 – 1	3 – 9	■	■	■		■
<b>Neolone® PE Preservative</b>	Phenoxyethanol/ Methylisothiazolinone	Liquid	< 0.09	3 – 10		■			
<b>Kalama® Sodium Benzoate NF/FCC</b>	Sodium benzoate	Grains, Powder, Extruded Dust-Free, or 33% in solution	0.1 – 1	2 – 6.5	■	■	■	■	■
<b>Purox® S</b> 	Sodium benzoate	Grains	0.1 – 1	2 – 6.5	■	■	■	■	■
<b>Solbrol® SC Na</b>	Sodium salicylate	Powder	0.2 – 0.5	2 – 6.5	■	■			■

\* non-drug use

 Available as Scopeblue® variant

Leave-On Skin Care  
Rinse-Off Skin Care  
Wipes  
\*Oral Care  
Color Cosmetics

**Note:** The dosages and applications listed in the above tables are recommended dosages and uses for which these products are suitable. All application areas should be considered as examples and have regulatory limitations. Allowed dosages and applications vary by country, hence please reach out to your LANXESS representative for country specific information on the registration status of each product.

## Multifunctionals & other Personal Care Ingredients

Name	INCI	Benefits	Properties			Application Examples				
			Form	Typical%	pH range	Leave-On Skin Care	Rinse-Off Skin Care	Wipes	*Oral Care	Color Cosmetics
<b>Kalama® 3PP FCC</b>	Phenylpropanol	Fragrance, solvent, odor masking, process aid	Liquid	0.1 – 0.5	2 – 10	■	■	■	■	■
<b>Purolan® HD-LO</b>	1,2-Hexanediol	Low-odor humectant and solvent	Liquid	1 – 5	2 – 13	■	■	■		■
<b>Purolan® OD</b>	Caprylyl glycol	Emollient, improved skin feel and emulsion stability	Waxy solid	1 – 3	2 – 13	■	■	■		■
<b>Purolan® PD-LO</b>	Pentylene glycol	Low-odor humectant, solvent, and spreading agent	Liquid	1 – 3	2 – 13	■	■	■		■
<b>Purolan® PD-LO Natural</b>	Pentylene glycol	Low-odor, renewable humectant, solvent, and spreading agent	Liquid	1 – 3	2 – 13	■	■	■		■
<b>Solbrol® SC Na</b>	Sodium salicylate	Exfoliant, anti-acne, keratolytic	Powder	0.2 – 0.5	2 – 6.5	■	■			■
<b>Purolan® IDD</b>	Isododecane	Fast drying solvent, emollient, improved skin feel and spreadability, moisturizer, conditioner	Liquid	1 – 90	1 – 14	■	■	■		■
<b>Purolan® IHD</b>	Isohexadecane	Emollient, improved skin feel and spreadability, moisturizer, conditioner, solvent	Liquid	1 – 42	1 – 14	■	■	■		■
<b>Purolan® IOC</b>	Isooctane	Quick-drying solvent, improved spreadability, volatile carrier	Liquid	1 – 40	1 – 14					■
<b>Purolan® TEC</b>	Triethyl Citrate	Personal care solvent, fragrance carrier, deodorant ingredient, COSMOS approved	Liquid	0.1 – 6	5 – 8	■	■	■		■
<b>Oxone™</b>	Potassium monopersulfate	Oral Care oxidizing agent	Powder	1 – 20	2 – 9					■

\* non-drug use

Leave-On Skin Care  
Rinse-Off Skin Care  
Wipes  
\*Oral Care  
Color Cosmetics

**Note:** The dosages and applications listed in the above tables are recommended dosages and uses for which these products are suitable. All application areas should be considered as examples and have regulatory limitations. Allowed dosages and applications vary by country, hence please reach out to your LANXESS representative for country specific information on the registration status of each product.



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LANXESS Consumer Care

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Unless specified to the contrary, the values given have been established on standardized test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that the results refer exclusively to the specimens tested. Under certain conditions, the test results established can be affected to a considerable extent by the processing conditions and manufacturing process.

**Please use the LANXESS products safely. Always read the label and product information before use.**

**Note:** Information contained in this publication is current as of October, 2023. Please contact LANXESS Deutschland GmbH respectively LANXESS Corporation to determine if this publication has been revised.

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