QUALITY CARES.



Product Overview

High-purity ingredients for Personal Care

QUALITY WORKS.



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WELCOME TO LANXESS DISTRIBUTION

LANXESS is a leading specialty chemicals company, currently represented at 74 production sites worldwide. The core business of LANXESS is the development, manufacturing and marketing of chemical intermediates, additives, specialty chemicals and plastics. As a 100% subsidiary, LANXESS Distribution is focused on the marketing and distribution of premium chemical products, providing expert solutions and specialist advice to our customers.

Our Personal Care raw materials are notable for their high level of purity, making them especially suitable for the stringent quality requirements of the cosmetics industry.

Combined with our technical expertise, international network, flexible lot sizes and outstanding service, this has made us a reliable, long-term partner for the global cosmetics industry.

QUALITY CARES.



PERSONAL CARE PRODUCTS FROM LANXESS DISTRIBUTION

Our Personal Care product range adds value to your cosmetic formulations. Emollients for perfect skin feel or anti-aging actives – we help to make your formulation special.

PUROLAN® – high-purity ingredients

Isoparaffins, such as PUROLAN® IDD are emollients obtained via sophisticated multi-step synthesis. Unlike paraffins from refined crude oil, the synthesis route leads to high-purity hydrocarbons with precisely defined chain length. These products are colorless, odorless and non-comedogenic. They are suitable for a wide range of cosmetic applications. PUROLAN® Isoparaffins are available in four types, varying in volatility and viscosity.

PUROLAN® Glucan is a powerful, completely natural antiaging active. Usually yeast glucan, the most active type of glucan, is not soluble. Thanks to an innovative process, it is now available as a stable aqueous dispersion.

Our portfolio also includes a range of diols that are truly multifuntional. They can be used as humectants, solvents and spreading agents and work synergistically with preservatives. PUROLAN® PD-LO and PUROLAN® HD-LO are suitable for formulations with low fragrance content due to their low odor.

PUROLAN® BHT is widely known as an effective antioxidant and is suitable for numerous cosmetic applications. It is used in cosmetics for the stabilization of oils and fatty acids in order to prevent them from becoming rancid.

PUROLAN® ZnO is an efficient sun screen filter, in particular against UVA radiation. It shows extremely low whitening and has a very low content of heavy metals. A version coated with dimethicone, PUROLAN® ZnO coated, is also available.

Solbrol® – performance for reliable preservation

Our Solbrol® range comprises cosmetic preservatives. It includes the proven class of parabens as well as paraben-free solutions. The range also includes specially designed blends for high pH values and preservative-free protection. Blends suitable for natural formulations are also available.

Skin Care

Isoparaffins like PUROLAN® IDD, IHD and IEC significantly improve the skin feel and spreadability of creams and lotions. In particular they can support or even replace silicones in these applications. PUROLAN® Triacetin has a proven track record as a highly efficient pH stabilizer when formulating with urea. PUROLAN® Glucan is a very effective active for anti-aging

formulations. Its ability to support the dermal immune system makes it an ideal ingredient for suncare products, reducing UV-induced damage. PUROLAN® ZnO and PUROLAN® ZnO coated are efficient sun screen filters, in particular against UVA radiation.

| Trade Name | INCI Name | Function |
|---------------------|--------------------------------|-----------|
| PUROLAN® IDD | Isododecane | emollient |
| PUROLAN® IHD | Isohexadecane | emollient |
| PUROLAN® IEC | Isoeicosane | emollient |
| PUROLAN® Glucan | Yeast Glucan | active |
| PUROLAN® Triacetin | Triacetin | solvent |
| PUROLAN® ZnO | Zinc Oxide (nano) | UV filter |
| PUROLAN® ZnO coated | Zinc Oxide (nano), Dimethicone | UV filter |



Hair Care

Silicone replacement with Isoparaffins, such as PUROLAN® IDD, is possible not only in skin care but also in hair care formulations. Isoparaffins act as conditioners, moisturizers and help

control frizz. In shampoos they help to reduce the drying time of wet hair.

| Trade Name | INCI Name | Function |
|--------------|-------------|--------------------|
| PUROLAN® IDD | Isododecane | solvent |
| PUROLAN® IEC | Isoeicosane | solvent, emollient |

Nail Care

PUROLAN® Triacetin, PUROLAN® TP, PUOLAN® ETSA and the citrates PUROLAN® ATBC, PUROLAN® BC and PUROLAN® TEC are effective plasticizers that can replace phthalates in nail varnishes.

| Trade Name | INCI Name | Function |
|--------------------|----------------------------|----------------------|
| PUROLAN® TEC | Triethyl Citrate | plasticizer |
| PUROLAN® BC | Tributyl Citrate | plasticizer |
| PUROLAN® ATBC | Acetyl Tributyl Citrate | plasticizer |
| PUROLAN® Triacetin | Triacetin | solvent, plasticizer |
| PUROLAN® TP | Triphenyl Phosphate | plasticizer |
| PUROLAN® ETSA | Ethyl Tosylamide | plasticizer |
| PUROLAN® TiO2 | Titanium Dioxide (Anatase) | pigment |
| | | |



Color Cosmetics

PUROLAN® IDD and PUROLAN® IOC are perfect solvents for fast drying formulations like mascara, thanks to their high volatility.

PUROLAN® TiO2 A is a high-purity anatase titanium dioxide pigment which provides an excellent whitening effect for decorative cosmetics.

| Trade Name | INCI Name | Function |
|-----------------|----------------------------|-----------|
| PUROLAN® IOC | Isooctane | solvent |
| PUROLAN® IDD | Isododecane | solvent |
| PUROLAN® IHD | Isohexadecane | emollient |
| PUROLAN® TiO2 A | Titanium Dioxide (Anatase) | pigment |

Deodorants

PUROLAN® TEC is a key ingredient for deodorants, especially for mineral-free formulations. It reduces odor by effectively blocking the enzymatic decomposition of sweat.

| Trade Name | INCI Name | Function |
|--------------|------------------|----------|
| PUROLAN® TEC | Triethyl Citrate | masking |



Flavors & Fragrances

Our portfolio includes both fragrances as well as formulation ingredients. The fragrances are used for their own aroma and contribution to the final scent of a fragrance composition, these fragrance ingredients are usually not converted and

form part of the final formulation. The formulation products are used in the final manufacturing step during blending. They are auxiliary products, usually with no inherent scent and comprise solvents, carriers and stabilizers.

| Trade Name | INCI Name | Function |
|--------------------|------------------|----------------------|
| PUROLAN® AC | Benzyl Acetate | fragrance ingredient |
| PUROLAN® AL | Benzaldehyd | fragrance ingredient |
| PUROLAN® BB | Benzyl Benzoate | solvent |
| PUROLAN® BC | Tributyl Citrate | solvent |
| PUROLAN® CA | Cinnamal | fragrance ingredient |
| PUROLAN® DPO | Diphenyl Ether | fragrance ingredient |
| PUROLAN® TEC | Triethyl Citrate | solvent |
| PUROLAN® Triacetin | Triacetin | solvent |



Preservatives and Antioxidants

Due to their proven safety profile and efficacy, parabens are used in nearly all cosmetic applications. PUROLAN® PE and PUROLAN® BA are ideal solvents for preservative blends. Their performance is significantly improved in combination with organic acids or their respective salts, like Solbrol® BZ (Benzoic Acid), Solbrol® BZ Na (Sodium Benzoate) and Solbrol® SC Na (Sodium Salicylate). Solbrol® LB2, LB4 and LB6 represent optimized solutions of organic acids. They offer high efficacy both against bacteria and fungi, especially at low pH values. For preservation also of alkaline formu-

lations, Solbrol® ABC, ACC and Solbrol® TP are excellent choices. Solbrol® CP is a solution for formulation protection without listed preservatives. Solbrol® FFA is effective for natural formulations. This blend is entirely based on renewable ingredients. PUROLAN® BHT helps to prolong the shelf life of cosmetic formulations by protecting unsaturated fats and oils from oxidization. The table below shows application areas in which the respective products are commonly used. Please note that this does not necessarily ex-clude the suitability for other uses.

ics

| Trade Name | INCI Name | Skin Care | Hair Care | Color Cosmeti | Fragrances | Oral Care | Deodorants |
|----------------|--|-----------|-----------|---------------|------------|-----------|------------|
| PUROLAN® BA | Benzyl Alcohol | Χ | Χ | | | Χ | Χ |
| PUROLAN® BHT | BHT | Χ | Χ | Χ | Χ | Χ | Χ |
| PUROLAN® HD-LO | 1,2-Hexanediol | Χ | Χ | Χ | | | |
| PUROLAN® OD | Caprylyl Glycol | Χ | Χ | Χ | | | |
| PUROLAN® PD-LO | Pentylene Glycol | Χ | Χ | Χ | | | |
| PUROLAN® PE | Phenoxyethanol | Χ | Χ | | | | X |
| Solbrol® A | Ethylparaben | Χ | Χ | Χ | | Χ | Χ |
| Solbrol® BZ | Benzoic Acid | Χ | Χ | Χ | Χ | Χ | X |
| Solbrol® BZ Na | Sodium Benzoate | Χ | Χ | Χ | Χ | Χ | Χ |
| Solbrol® FFA | Aqua, Lactic Acid, Propanediol, Citric Acid, Tartaric Acid, Gluconic Acid | Χ | Χ | Χ | Χ | Χ | Χ |
| Solbrol® M | Methylparaben | Χ | Χ | Χ | | Χ | X |
| Solbrol® M Na | Sodium Methylparaben | Χ | Χ | Χ | | Χ | Χ |
| Solbrol® P | Propylparaben | Χ | Χ | Χ | | Χ | Χ |
| Solbrol® P Na | Sodium Propylparaben | Χ | Χ | Χ | | Χ | Χ |
| Solbrol® SC Na | Sodium Salicylate | Χ | Χ | Χ | | | |
| Solbrol® ABC | Aqua, Triethylene Glycol, Caprylyl Glycol, Benzalkonium Chloride, Ethyl Lauroyl Arginate HCL | Χ | Χ | Χ | | | Χ |
| Solbrol® ACC | Aqua, Triethylene Glycol, Caprylyl Glycol, Cetylpyridinium Chloride, Ethyl Lauroyl Arginate HCL | Χ | Χ | Χ | | | Χ |
| Solbrol® CP | Caprylyl Glycol, Phenethyl Alcohol | Χ | Χ | Χ | | | Χ |
| Solbrol® LB2 | Dehydroacetic Acid, Benzoic Acid, Benzyl Alcohol | Χ | Χ | | | | |
| Solbrol® LB4 | Benzoic Acid, Sorbic Acid, Dehydroacetic Acid, Caprylyl Glycol, Benzyl Alcohol | Χ | Χ | | | | |
| Solbrol® LB6 | Dehydroacetic Acid, Sorbic Acid, Benzoic Acid, Phenoxyethanol | Χ | Χ | | | | |
| Solbrol® PEH | Phenoxyethanol, Ethylhexyglycerin | Χ | Χ | Χ | | | Χ |
| Solbrol® SP | Propanediol, Salix Alba Bark Extract | Χ | Χ | | Χ | | Χ |
| Solbrol® TP | Phenoxyethanol, Triethylene Glycol | Χ | Χ | | Χ | | Χ |
| | | | | | | | |

PRODUCT OVERVIEW

| Trade Name | INCI Name | CAS No. |
|---------------------|--------------------------------|-----------------------|
| Isoparaffins | | |
| PUROLAN® IOC | Isooctane | 540-84-1 |
| PUROLAN® IDD | Isododecane | 13475-82-6* |
| PUROLAN® IHD | Isohexadecane | 93685-80-4 |
| PUROLAN® IEC | Isoeicosane | 93685-79-1 |
| Actives | | |
| PUROLAN® Glucan | Yeast Betaglucan | 53238-80-5 |
| UV filters | | |
| PUROLAN® ZnO | Zinc Oxide (nano) | 1314-13-2 |
| PUROLAN® ZnO coated | Zinc Oxide (nano), Dimethicone | 1314-13-2, 63148-62-9 |
| Color pigments | | |
| PUROLAN® TiO2 A | Titanium Dioxide (Anatase) | 13463-67-7 |
| | | |
| Esters | | |
| PUROLAN® TEC | Triethyl Citrate | 77-93-0 |
| PUROLAN® BC | Tributyl Citrate | 77-94-1 |
| PUROLAN® ATBC | Acetyl Tributyl Citrate | 77-90-7 |
| PUROLAN® Triacetin | Triacetin | 102-76-1 |
| PUROLAN® TP | Triphenyl Phosphate | 115-86-6 |
| PUROLAN® ETSA | Ethyl Tosylamide | 8047-99-2 |
| Aroma chemicals | | |
| PUROLAN® AC | Benzyl Acetate | 140-11-4 |
| PUROLAN® AL | Benzaldehyde | 100-52-7 |
| PUROLAN® BB | Benzyl Benzoate | 120-51-4 |
| PUROLAN® CA | Cinnamal | 104-55-2 |
| PUROLAN® DPO | Diphenyl Ether | 101-84-8 |

| Trade Name | INCI Name | CAS No. |
|-------------------------------|--|------------|
| Preservatives, Synergists & A | Antioxidants | |
| Parabens Parabens | | |
| Solbrol® A | Ethylparaben | 120-47-8 |
| Solbrol® M | Methylparaben | 99-76-3 |
| Solbrol® M Na | Sodium Methylparaben | 5026-62-0 |
| Solbrol® P | Propylparaben | 94-13-3 |
| Solbrol® P Na | Sodium Propylparaben | 35285-69-9 |
| Paraben-free single ingredier | nts | |
| Solbrol® BZ | Benzoic Acid | 65-85-0 |
| Solbrol® BZ Na | Sodium Benzoate | 532-32-1 |
| Solbrol® SC Na | Sodium Salicylate | 54-21-7 |
| PUROLAN® BA | Benzyl Alcohol | 100-51-6 |
| PUROLAN® PE | Phenoxyethanol | 122-99-6 |
| Paraben-free blends | | |
| Solbrol® ABC | Aqua, Triethylene Glycol, Caprylyl Glycol, Benzalkonium Chloride, Ethyl Lauroyl Arginate HCL | - |
| Solbrol® ACC | Aqua, Triethylene Glycol, Caprylyl Glycol, Cetylpyridinium Chloride, Ethyl Lauroyl Arginate HCL | _ |
| Solbrol® LB2 | Dehydroacetic Acid, Benzoic Acid, Benzyl Alcohol | _ |
| Solbrol [®] LB4 | Benzoic Acid, Sorbic Acid, Dehydroacetic Acid, Caprylyl Glycol, Benzyl Alcohol | _ |
| Solbrol® LB6 | Dehydroacetic Acid, Sorbic Acid, Benzoic Acid, Phenoxyethanol | _ |
| Solbrol® PEH | Phenoxyethanol, Ethylhexylglycerin | _ |
| Solbrol® SP | Propanediol, Salix Alba Bark Extract | _ |
| Solbrol® TP | Phenoxyethanol, Triethylene Glycol | _ |
| Synergists & antioxidants | | |
| Solbrol® CP | Caprylyl Glycol, Phenethyl Alcohol | _ |
| Solbrol® FFA | Aqua, Lactic Acid, Propanediol, Citric Acid, Tartaric Acid, Gluconic Acid | _ |
| PUROLAN® PD-LO* | Pentylene Glycol | 5343-92-0 |
| PUROLAN® HD-LO* | 1,2-Hexanediol | 6920-22-5 |
| PUROLAN® OD | Caprylyl Glycol | 1117-86-8 |
| PUROLAN® BHT | BHT | 128-37-0 |



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Health and safety information

Appropriate documentation was compiled with information on the health and safety measures that have to be observed in handling the LANXESS products mentioned in this brochure. For materials mentioned here that are not LANXESS products, the operational hygiene and other safety measures recommended by the respective manufacturers must be observed. Before working with these products, you must read and familiarise yourself with the available information on their dangers, proper use and handling. This point is of decisive importance.

Information is available in various forms: such as safety data sheets, product information and product labels. Please contact your LANXESS representative in Germany or the Department of Regulatory Affairs and Product Safety of LANXESS Deutschland. For business in the USA, please contact the LANXESS Product Safety and Regulatory Affairs Department in Pittsburgh, Pennsylvania.

Information on Regulatory Compliance

For some end use purposes of the products found in this brochure, the applicable regulations must be observed, including those of the FDA, BfR, NSF, USDA and CPSC. If you have any questions regarding the approval status of these products, please contact your representative at LANXESS Deutschland GmbH or the Department of Regulatory Affairs and Product Safety of LANXESS Deutschland GmbH or, for business in the USA, your representative at LANXESS Corporation, the LANXESS Regulatory Affairs Manager in Pittsburgh, Pennsylvania.

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