



Product Range

Bio-based ingredients

Jungbunzlauer

*From nature
to ingredients®*

About Jungbunzlauer

Jungbunzlauer is one of the world's leading producers of biodegradable ingredients of natural origin. The Swiss-based, international company's roots date back to 1867. Today, Jungbunzlauer specialises in citric acid, xanthan gum, gluconates, lactics, specialties, special salts and sweeteners for the food, beverage, pharmaceutical and cosmetic industry, as well as for various other industrial applications.

Jungbunzlauer's products are manufactured utilising natural fermentation processes. All its products can be used, transported and disposed of in a secure and ecologically safe way. Jungbunzlauer operates manufacturing plants in Austria, Canada, France and Germany.

A worldwide network of sales companies and distributors with a thorough understanding of target markets and client requirements underlies Jungbunzlauer's strong market and customer focus. Committed to its rigorous quality standards, Jungbunzlauer guarantees for the excellence and sustainability of its products and services.

With their expert knowledge, Jungbunzlauer's Technical Service, Market Development and Application Technology teams support our customers in resolving their commercial and technical challenges with solutions tailor-made to their individual requirements and with up-to-date technical information on our products.

The high-class quality of our products combines decades of experience with up-to-date know-how.

Products

Based on years of experience and acquired knowledge, Jungbunzlauer offers a broad spectrum of biodegradable key ingredients of natural origin to a diversified range of industries worldwide. Jungbunzlauer's added value products are manufactured to the highest quality standards and are available in different grades with a wide variety of specifications and performances.

Citrics

Citrics represent the largest product group within the Jungbunzlauer product portfolio. This product group contains citric acid – the most important organic fruit acid – and trisodium citrate – the most widely used salt of citric acid. Citric acid is marketed in dry form as well as in solution under the trade name of LIQUINAT®. Citric acid as well as trisodium citrate are readily biodegradable and safe for both industry and consumers. These properties underline their utility as food and pharmaceutical ingredients. Other citrate salts are covered by Jungbunzlauer's Special Salts product group.

Citric Acid

Citric acid is a naturally occurring fruit acid produced commercially by microbial fermentation of a carbohydrate substrate. Characterised by a pleasant tart taste and easy solubility, it is the most widely used organic acid and pH-control agent in foods, beverages and pharmaceuticals. Its excellent ability to form complexes with trace metals makes it a powerful antioxidant synergist. It stabilises colour, taste, flavour and vitamins in various food applications. The unique properties of citric acid can also be applied over a broad range of industrial applications. Many industries have already taken advantage of its outstanding chelating ability and its non-toxicity to pioneer new uses. Crystalline citric acid from Jungbunzlauer is commercially available in two forms: citric acid anhydrous and citric acid monohydrate.

Jungbunzlauer LIQUINAT® is a ready to use aqueous solution of citric acid, which makes it easy to handle. LIQUINAT® is used as acid and pH-control agent in foods, beverages and pharmaceuticals.

Trisodium Citrate

This tribasic salt of citric acid is being offered in two forms: trisodium citrate dihydrate and trisodium citrate anhydrous. The dihydrate form of trisodium citrate is commonly used in foods, beverages and various industrial applications as buffering and sequestering agent as well as an emulsifying salt. As builder in automatic dish washing detergents (ADWD) it replaces phosphates and hence substantially contributes in alleviating eutrophication (excessive growth of plants and algae in water bodies).

Its anhydrous form is manufactured from trisodium citrate dihydrate by a patented drying process. Trisodium citrate anhydrous crystals have a porous matrix that can be used as a carrier for inorganic and/or organic substances. It is not prone to caking and can be used in applications where excess water is not desired. Thus, trisodium citrate anhydrous finds its usage in water sensitive applications such as dry blends and instant beverages, detergents as well as in tablets and over-the-counter (OTC) drugs.



Gluconates

Jungbunzlauer Gluconates are multifunctional ingredients for food, personal care, pharmaceutical and technical applications. Naturally occurring in fruits, wine, honey and produced by fermentation of renewable carbohydrates, they are sustainable, readily biodegradable and safe products. The product group consists of glucono-delta-lactone (GdL), sodium gluconate and the liquid gluconates. Mineral salts of gluconic acid, produced by Jungbunzlauer, are part of the Special Salts product group.

Glucono-delta-Lactone

Glucono-delta-lactone (GdL), a white crystalline powder, is a dry form of gluconic acid obtained by removing water during crystallisation. When GdL comes in contact with water, it dissolves completely and hydrolyses progressively to gluconic acid, while at the same time reducing the pH-value. Gluconic acid has a mild taste profile, which is why GdL is commonly used as an acidifier in the production of many food categories. GdL is used in tofu and white cheese products as a coagulant for soy and milk proteins, in bakery products as sodium and phosphate free leavening acid, in meat products as an alternative to starter cultures for faster curing of raw sausages, and as preservative for ready-to-eat pasta, noodles and rice.



Gluconic Acid

Gluconic acid occurs naturally in fruit, honey, kombucha tea, and wine. Jungbunzlauer provides both food and technical grade gluconic acid as a 50% solution in water. In food applications, gluconic acid does not only regulate the pH of the finished product, but also provides a long-lasting and mild tasting profile that is preferred in beverages, sauces and dressings. Technical grade gluconic acid is used in cleaning products (CIP), where it dissolves mineral deposits.

Sodium Gluconate

Sodium gluconate, a white crystalline powder, is the sodium salt of gluconic acid. It is predominately used for technical applications as an effective set retarder and plasticiser in concrete admixtures, as well as a chelating agent for calcium and magnesium ions in industrial, institutional and household cleaning products. It is also used for the cleaning of metal surfaces in the metal plating and electronic industry, and as formulations aid in agriculture to enhance micronutrient uptake. In personal care products, sodium gluconate is used as a chelating agent (replacement of EDTA) as well as a powerful moisturising ingredient. In the past years sodium gluconate's use in food applications has become more widespread. It is used to cover bitter flavours of high intensity sweeteners, mineral salts and caffeine in beverages.

NAGLUSOL®

NAGLUSOL® is a 60% technical grade solution of equal parts of gluconic acid and sodium gluconate. As a concentrated non-corrosive solution, stable at low temperatures (down to -10°C), it combines the advantages of sodium gluconate and gluconic acid. It is used in the same applications as its components.

Sodium Gluconate EMF 1240

Sodium gluconate EMF 1240 is a 45% technical grade solution issued from the sodium gluconate fermentation. It is a cost effective set retarder and plasticiser for concrete.

GLUCOSET®

The GLUCOSET® product range offers reliable set retarder benefits especially tailored to the needs of the gypsum industry. Based on special granulations of sodium gluconate, GdL and tartaric acid, GLUCOSET® products can substitute natural tartaric acid, the benchmark set retarder in gypsum dry mixes, at significant lower costs.

Lactics

Lactics is Jungbunzlauer's newest product group. The backbone of this group is L(+)-lactic acid, the second largest edible organic acid after citric acid. Jungbunzlauer's Lactics portfolio also contains lactates and blends.

L(+)-Lactic Acid

Lactic acid is an organic acid which occurs naturally in the human body and in fermented foods. The commercial production of lactic acid is typically done by fermentation. Because the L(+) form is preferred for its superior metabolism, Jungbunzlauer has chosen to produce pure L(+)-lactic acid by traditional fermentation of natural carbohydrates. Available as colourless to yellowish aqueous solutions of various concentrations, Jungbunzlauer L(+)-lactic acid is a mild tasting acidity regulator with flavour enhancing and antibacterial properties. It can be used in a wide range of food, personal care and chemical products.

Lactic Acid Blends

Lactic acid buffered is the first lactic acid blend offered by Jungbunzlauer. It is a liquid mixture of L(+)-lactic acid and sodium lactate. Lactic acid buffered provides an even milder acidification than lactic acid and is particularly beneficial in confectionery products to reduce sugar inversion. Blends of lactic acid with other food acids can be produced on request.

Sodium Lactate

Jungbunzlauer sodium lactate is the sodium salt of L(+)-lactic acid, obtained by neutralisation of the acid of natural origin with a high purity sodium source. It is available as a 60% solution in water. Sodium lactate is a safe preservative for processed meat and fish products. It is also used as a buffering agent in confectionery and, as a result of its high water holding capacity, as a humectant and moisturiser in personal and home care products.

Potassium Lactate

Jungbunzlauer potassium lactate is a liquid potassium salt of L(+)-lactic acid, obtained by neutralisation of the acid of natural origin with a high purity potassium source. Used as a sodium free pathogen control agent in meat and fish products, it addresses the concerns of health organisations and consumers about reducing sodium intake. As a component of the natural moisturising factor (NMF) of the skin, it also serves as a powerful, yet smooth moisturiser in beauty care.

Lactate Blends

Jungbunzlauer offers a variety of blends of sodium or potassium lactate with sodium or potassium acetate or diacetate. Combinations of lactates and acetates create a synergistic effect for pathogen and overall microbial control, thus increasing safety and shelf life of processed meat and fish products.



Special Salts

Jungbunzlauer's Special Salts product group comprises a unique range of high-purity organic sources of calcium, magnesium, potassium, zinc and sodium derived from citric or gluconic acid.

Monosodium Citrate

Monosodium citrate, an anhydrous acid salt, occupies an intermediate position between citric acid and the neutral trisodium citrate. It is applied as a mild acid in effervescent tablets, dry blends and baking powder. Furthermore, monosodium citrate is also commonly used as non-toxic blowing agent, e.g. to foam food contact plastics.

Tricalcium Citrate

Tricalcium citrate is one of the most important calcium salts used in dairy products, processed fruits, baby foods (especially infant formula), clinical nutrition, tablets, beverages and other calcium-fortified products. Its main characteristics are high calcium content (21%), excellent bioavailability and neutral taste. Direct compressible types make tricalcium citrate the preferred choice for calcium tablets. Furthermore, tricalcium citrate displays specific functionalities as a heat-stable pH regulator or firming agent in processed foods. It is also used as an anti-caking agent due to its non-hygroscopic characteristics.

Calcium Lactate Gluconate

Calcium lactate gluconate is a mixture of calcium lactate and calcium gluconate. In pharmaceuticals, it is used in effervescent tablets and instant preparations as a calcium source with excellent bioavailability. In food and beverages, the outstanding characteristics of calcium lactate gluconate combining high solubility (400 g/l) and neutral taste lead to new applications in a wide range of products, such as clear, carbonated or concentrated beverages as well as dairy drinks and confectionery.



Trimagnesium Citrate

Trimagnesium citrates are high-purity organic salts of magnesium, characterised by superior bioavailability, good solubility and high mineral content. Jungbunzlauer offers the two commonly available forms trimagnesium citrate anhydrous and nonahydrate. Due to their neutral taste and ease of use, they are a preferred source for magnesium in food, beverages, nutritional supplements and pharmaceuticals. Agglomerated forms of trimagnesium citrate allow the direct compression of tablets. Being an excellent desiccant, it is commonly used to stabilise dry blends and to protect water sensitive ingredients.

Tripotassium Citrate

Tripotassium citrate displays a similar functionality to trisodium citrate and is recommended in all food products which require low sodium content. Being an excellent potassium source and systemic alkaliser, tripotassium citrate is also used in pharmaceuticals as an active ingredient, e.g. for the treatment of kidney stones, as well as in dietary supplements and functional foods to promote acid-base balance. Added to dentifrice, it is clinically proven to reduce pain for people with sensitive teeth. Moreover, it is used in several technical applications.

Potassium Gluconate

Potassium gluconate is used to replace sodium-containing salts in food and serves as a potassium source in supplements and food products, e.g. to maintain healthy blood pressure. In pharmaceuticals, it is used as a systemic alkaliser or to fight potassium deficiency. Potassium gluconate shows excellent compressibility and is therefore commonly used for tablets. In technical applications, it combines an outstanding chelating capacity with an excellent biodegradability and good solubility.

Zinc Citrate

Zinc citrate is an organic zinc salt with a high mineral content (31%) and neutral taste. Due to its superior bioavailability, physiological compatibility and wide range of health benefits it is used for zinc fortification, food supplements and beauty products. In dental care products it is used due to its antimicrobial and anti-inflammatory effects and its ability to reduce the formation of dental plaque and tartar.



Specialties

Based on our core products, Jungbunzlauer offers a number of Specialties products which are used in food, pharmaceutical and also technical applications.

sub4salt®

Awareness campaigns and national health plans have strongly encouraged food manufacturers to reduce salt in their products. The main challenge for manufacturers when reducing salt is the loss of palatability. sub4salt® and sub4salt® plus help to reduce sodium content by 25 - 50%, without compromising taste or functionality. Targeted at the meat industry, sub4salt® cure combines benefits of the technological properties of a curing salt with those of sodium reduction.



ESSICCUM®

ESSICCUM® combines the flavour and functionality of vinegar in a powdered form. The unique crystalline acidulant is completely soluble in water and about eight times more concentrated than liquid vinegar. ESSICCUM® is therefore used in regular and vegetarian convenience products giving typical characteristics to dry blends where a vinegar flavour is desired. ESSICCUM® K is a lactose free variation of the standard product to accommodate food intolerances against dairy derived additives or ethnical and religious concerns about animal derived ingredients.

Sodium Diacetate

Sodium diacetate is a free flowing, convenient, readily available source of acetic acid and sodium acetate in granular form. The manufacturing process is based on the ability to place free acetic acid into the crystal lattice of neutral sodium acetate. The acid is firmly held in place, as is evident from the negligible odour of the product. Sodium diacetate is used as an antimicrobial, flavouring and pH control agent in various food products. The main applications are in meat and bakery products and in snack foods.

Functional Acids

In certain applications there is a requirement for more than what the standard product properties of citric acid can offer. Unique surface modification techniques or adding high-quality materials to the core product lead to an exceptional range of functional acids. Citric acid DC is a direct compressible type of citric acid; this functionality avoids time and energy consuming pre-processing steps before compaction of effervescent tablets. In crystalline form, CITROCOAT® N is less hygroscopic and less reactive with other ingredients and therefore provides excellent stability for instant drinks, healthcare products or laundry powders and tabs during storage. Citric acid S40 is a very fine powder with superior free-flowing abilities for easy handling. Adding citric acid S40 to concrete or gypsum improves the rheological properties and increases their mechanical strength.



CITROFOL®

CITROFOL® citrate esters offer an excellent alternative to products which are under scrutiny. They demonstrate equal plasticiser performance to replace phthalates and adipates in many applications such as toys, cosmetics, pharmaceutical coatings, food contact films, food closure gaskets, medical devices and other plastic articles. CITROFOL® BII is a suitable additive for bio-based plastics, which now bears the seedling symbol for sustainability. Another milestone is the usage of butanol from renewable resources. CITROFOL® BI eco is a 100% natural based product while the bio-based share for CITROFOL® BII eco increases to 90%. Besides the individual ester types, Jungbunzlauer offers CITROFOL® Systems, a range of tailor made plasticisers for technical applications which combines outstanding curing behaviour with low migration properties.

Sweeteners

The Sweeteners product group contains ERYLITE®, ERYLITE® Stevia and ERYLITE® Bronze. ERYLITE® and ERYLITE® based sweetening systems relate to a number of today's dietary topics, such as natural sweetening, sugar reduction/replacement, glycemc index based diets or tooth-friendliness.

ERYLITE®

ERYLITE® is the first natural polyol, a fermentation based bulk sweetener. Besides being considered natural its main benefit is a caloric value of zero (in Europe and Japan, 0.2 kcal/g in the USA) which makes it an excellent sweetener to formulate mid, low and zero calorie foods and beverages. ERYLITE® has a glycemc index of zero, a clean sweet taste, a 60 - 70% sweetness level of sugar and is much more tolerable than other polyols. Furthermore, it is also tooth-friendly and works as cariostatic agent. It is approved in a large number of countries around the world, including the main food markets in Europe, North America and Asia.

ERYLITE® Stevia

ERYLITE® Stevia is a unique blend of ERYLITE® and Rebaudioside A, a highly pure stevia plant extract. This blend unites the taste quality, the digestive tolerance and the bulking functionality of ERYLITE® with the sweetening capacity of stevia plant extracts. The result, eligible for the 'natural' shelf, is a zero calorie sweetening system with excellent taste and full bulk sweetener functionality. ERYLITE® Stevia is available in a range of different sweetness levels with individual suitability to food and beverage applications.

ERYLITE® Bronze

ERYLITE® Bronze is Jungbunzlauer's version of brown or raw sugar. It is a low calorie sweetener of mild sweetness with a bronze colour and the pleasant flavour of malt and caramel. Its functionalities are the same as regular ERYLITE® and it has the same favourable physiological benefits: a zero glycemc index, a high digestive tolerance and tooth-friendliness.





Xanthan Gum

Xanthan gum from Jungbunzlauer is a unique hydrocolloid with exceptional rheological behaviour. Its highly elastic and shear thinning properties make it an outstanding stabiliser and thickener for water based systems.

Xanthan Gum

The food industry uses xanthan gum as a stand-alone ingredient or in combination with other hydrocolloids in a wide range of applications to impart viscosity, texture, mouthfeel, and for moisture retention, and the control of crystal growth.

The unique characteristics of xanthan gum are specifically used in dressings and sauces, where it provides excellent flow properties combined with more stability than any other hydrocolloid.

In cosmetic and pharmaceutical applications xanthan gum is used to provide stability and appealing viscosity in creams, lotions, emulsions, oral care and syrups, and can be used in the formulation of tablets as release retarder.

Because of its unique shear thinning flow behaviour, together with excellent pH and salt stability, xanthan gum is used in household and industrial products such as cleaners, paints and inks.

The petroleum industry makes extensive use of xanthan gums stability toward high salt contents and temperatures in high performance drilling fluids and in fluids for enhanced oil recovery.

Applications

Jungbunzlauer's know-how and experience in ingredients guarantees innovative solutions for a broad range of applications. In order to respond to changing consumer preferences and market trends, we are continuously monitoring scientific discoveries to apply in the development of new products, as well as the improvement of existing ones.

Beverages



- Excellent acidification
- Improved mouthfeel
- Taste optimisation
- Mineral fortification
- Calorie reduction

Industrial Applications



- Drilling fluids
- Concrete set retardation
- Safe polymer softening
- Heavy metal chelation

Food



- Food safety
- Superior stabilisation
- Sugar replacement
- Sodium reduction
- Mineral fortification

Personal Care



- Anti-bacterial
- Natural perfume fixation
- Smooth moisturising
- Natural deodorising
- Viscosity control

Cleaners & Detergents



- Eco-friendly chelation
- Safe descaling
- Anti-bacterial cleaning
- Rheology control
- Surface protection

Healthcare



- Active ingredients
- Mineral sources
- Excipients
- Natural sweetening

Beverages • Food • Feed & Pet Food

Beverages

Alcoholic Beverages	■ ■ ■		■ ■ ■ ■		■		■ ■ ■ ■
Carbonated Soft Drinks	■ ■ ■	■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■		■ ■ ■ ■ ■
Instant Drinks, Syrups	■ ■ ■ ■	■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■		■	■ ■ ■ ■ ■
Juice Drinks	■ ■ ■		■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■			■ ■ ■ ■ ■
RTD Tea and Coffee	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■		■	■ ■ ■ ■ ■
Sports and Energy Drinks	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■	■ ■ ■ ■ ■
Waters	■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■		■ ■ ■ ■ ■

Food

Baby Food, Infant Formula	■ ■ ■ ■		■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■		■		■
Bakery	■ ■ ■	■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■		■ ■ ■ ■ ■	■ ■ ■ ■ ■
Cereals, Snacks	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Confectionery	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Dairy	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Desserts, Ice Cream	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Flavours	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Fruit Preparations, Sweet Spreads	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Fruits, Vegetables	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Meat, Seafood	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Ready Meals, Instant Food	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Sauces, Dressings, Seasonings	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Soy Products		■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Table Top Products			■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■

Feed & Pet Food

Feed	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Pet Food	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■

Cleaners & Detergents • Industrial Applications

Cleaners & Detergents

Dish Washing	■	■	■	■			■	■	■	■			■			■	■	
Industrial Cleaners	■	■	■	■	■	■	■	■					■				■	■
Laundry Care	■	■	■	■			■	■					■				■	■
Surface Care	■	■	■	■	■	■	■	■			■	■					■	■

Industrial Applications	Citric Acid	LIQUINAT®	Trisodium Citrate Dihydrate	Trisodium Citrate Anhydrous	Gluconic Acid	Glucono-delta-Lactone	NAGLUSOL®	Sodium Gluconate	Sodium Gluconate EMF	GLUCOSET®	Lactic Acid	Sodium Lactate	Potassium Lactate	Monosodium Citrate	Tricalcium Citrate	Trimagnesium Citrate	Tripotassium Citrate	Potassium Gluconate	Zinc Citrate	CITROFOL® A1 - Triethyl Citrate	CITROFOL® A11 - Triethyl O-acetylcitrate	CITROFOL® A111 - Tris (2-ethylhexyl) O-acetylcitrate	CITROFOL® B1 - Tributyl Citrate	CITROFOL® B11 - Tributyl O-acetylcitrate	CITROFOL® Systems	Functional Acids	Xanthan Gum	
Adhesives, Sealants	■	■	■																		■	■	■	■	■	■	■	■
Agrochemicals, Fertilisers	■	■	■		■			■			■				■	■	■	■	■				■		■	■	■	■
Construction	■	■	■			■	■	■	■	■								■					■	■	■	■	■	
Fine Chemicals	■	■	■		■	■		■			■											■		■	■	■	■	
Inks, Paints, Coatings	■	■	■					■			■			■								■	■	■	■	■	■	
Metal Surface Treatment	■	■			■		■	■			■											■	■	■	■	■	■	
Oil Drilling	■	■	■								■																■	
Ore Mining and Refining	■	■																									■	
Paper	■	■	■				■	■										■				■		■			■	
Plastics, Polymers	■	■	■								■	■		■	■							■	■	■	■	■	■	
Textile, Leather	■	■	■		■		■	■			■							■					■	■	■	■	■	

Personal Care • Healthcare

Personal Care

Colour Cosmetics	■ ■ ■		■	■ ■ ■	■		■	■ ■ ■ ■ ■ ■ ■ ■	■	■
Deodorants	■ ■		■	■ ■ ■			■	■	■	■
Fragrances	■ ■ ■ ■			■ ■ ■ ■				■ ■		
Hair Care	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■ ■ ■	■		■ ■ ■	■ ■ ■ ■ ■ ■	■	■
Oral Care	■ ■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■ ■ ■	■ ■		■		■	■ ■ ■
Skin Care	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■ ■ ■	■		■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■	■
Soap and Bath Products	■ ■ ■	■	■	■ ■ ■ ■ ■	■		■ ■ ■ ■ ■		■	■

	Citric Acid LIQUINAT® Trisodium Citrate Dihydrate Trisodium Citrate Anhydrous	Gluconic Acid Glucono-delta-Lactone Sodium Gluconate	Lactic Acid Lactic Acid Blends Sodium Lactate Potassium Lactate	Monosodium Citrate Tricalcium Citrate Calcium Lactate Gluconate Trimagnesium Citrate Tripotassium Citrate Potassium Gluconate Zinc Citrate	CITROFOL® AI - Triethyl Citrate CITROFOL® AII - Triethyl O-acetylcitrate CITROFOL® BI - Tributyl Citrate CITROFOL® BII - Tributyl O-acetylcitrate CITROFOL® Systems Functional Acids sub4salt® ERYLITE® ERYLITE® Stevia Xanthan Gum					
Healthcare										
Clinical Nutrition	■ ■ ■ ■		■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■					■	■ ■ ■ ■ ■
Medical Devices	■ ■ ■								■ ■ ■ ■ ■	
OTC, Food Supplements	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■		■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Pharmaceutical Products	■ ■ ■ ■	■			■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■				■

Committed to sustainability and quality

Our environment and climate are threatened by pollution and an unsustainable use of resources. As a consequence, it is important to be aware of our responsibility for the environment and to cooperate for a more sustainable future. One way of doing so is to choose business partners that support this vision. Our mission, 'From nature to ingredients®', aimed at environmental, economic and social sustainability, commits us to the protection of people and their environment.



Environmental Sustainability

We aim to save as much energy, water, raw material and other sensitive inputs as possible. Jungbunzlauer therefore has the most advanced technologies and processes and we are working steadily to decrease greenhouse gas emissions. That's why our Corporate Carbon Footprint is calculated to ensure a continuous improvement of environmental standards and performance. Furthermore, we follow the goals and initiatives of the global Responsible Care® program.



Economic Sustainability

Jungbunzlauer is committed to preserving long-term sustainable prices by keeping costs at the lowest possible level. Additionally, we provide security of supply and price stability through our established back-integration system. Due to continuous investments, state-of-the-art manufacturing processes and comprehensive quality management, we are able to assure outstanding product quality.



Social Sustainability

All Jungbunzlauer production sites and offices comply with a high standard of social responsibility. Our personnel are employed on the basis of their qualifications, regardless of their gender, religion or race. This leads to a diverse and open work place for our employees. Through high employment standards, healthy and safe working conditions are also assured.



Vegan Offering

A continuously growing number of people choose a vegetarian or vegan lifestyle. Veganism does not stop at the edge of a plate, but covers all articles of daily use. Producers world-wide consequently adapt their range to broaden the offerings of animal-free products. Jungbunzlauer offers naturally sourced ingredients which are fully suitable for vegetarians and vegans.



Non-GMO Positioning

Jungbunzlauer can provide products following a strict Non-GMO policy. All raw materials used in our European manufacturing processes are purchased against strict Non-GMO specifications. All fermentation is done by using natural and non-genetically modified microorganisms.



The information contained herein has been compiled carefully to the best of our knowledge. We do not accept any responsibility or liability for the information given in respect to the described products. Our products have to be applied under full and own responsibility of the user, especially in respect to any patent rights of others and any law or government regulation.

Jungbunzlauer Group

Jungbunzlauer is represented in all major markets. Our regionalised setup of the sales organisations and respective local distribution partners enable us to provide optimal and efficient service to customers in more than 130 countries.

EUROPE

AUSTRIA – Vienna/Pernhofen

FRANCE – Marckolsheim

GERMANY – Ladenburg

NETHERLANDS – Papendrecht

SWITZERLAND – Basel



AMERICA

CANADA – Port Colborne

USA – Boston

USA – Chicago

MEXICO – Mexico City

ASIA

INDIA – Mumbai

SINGAPORE – Singapore

JAPAN – Tokyo

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