



Fe

Zn

Mg

Ca

K

Salts are
our Life



Dr. Paul Lohmann®

High value mineral salts

www.lohmann4minerals.com



The whole is
more than the
sum of its Parts.

Aristoteles





Dr. Paul Lohmann® management f.l.t.r.: Dr. Uwe Günther, Torsten Cuno, Jürgen Lohmann

Achieving more together

The famous chemist Justus von Liebig said: "Salt is the most precious of all jewels which the earth gives us." Mineral salts are essential to all life on our planet. For us at the Dr. Paul Lohmann® company, these salts are also vitally important—salts are our life!

Dr. Paul Lohmann GmbH KG manufactures a broad portfolio of mineral salts for use in a variety of applications. We've been producing these special salts for over 130 years and of course have a great deal of experience. Based on this long-standing tradition we have the expertise to reliably develop and produce high-quality mineral salts for the pharmaceutical industry, for food and nutritional supplements, cosmetics and many other areas in chemistry and technology. Tradition meets innovation.

Mineral salts are exciting chemical compounds. Our developers design new innovative products, combinations and applications in collaboration with our customers. Our research, development and application center is continuously generating new ideas, developing a great deal of potential in many markets.

At the Dr. Paul Lohmann® company, we gladly take on the challenges—worldwide.

We are here to serve people—salts are our life!

Uwe Günther Torsten Cuno Jürgen Lohmann

1886

In 1886, chemist Dr. Paul Lohmann began producing reduced iron (ferrum reductum) for the treatment of iron deficiency in a vacant factory located at Feuergraben in Hamelin.



Where Tradition meets Innovation

Consistent and flexible

Dr. Paul Lohmann® is a medium-sized, family-owned company that manufactures and develops mineral salts. The company's product range now includes more than 400 different salts in a total of over 7,000 different specifications. The company manufactures mineral salts according to GMP (Good Manufacturing Practice) and in line with international food and pharmaceutical standards. The production facilities are certified according to DIN EN ISO 9001:2015 and FSSC 22000/ISO 22000.

Development and advice

Development, consulting and service all go hand-in-hand at Dr. Paul Lohmann®. The research departments develop products suitable for the special applications and requirements of our customers. On request, the company can offer its business partners end-to-end documentation and industry-specific support and advice. Short lead times, reliability of supply and flexibility ensure the outstanding image of this international company in the global market. Consistently high-quality mineral salts, continuous development of production processes and service to the customer have been a permanent part of the company's philosophy for more than 130 years.

Trust and maximum purity

Consistent customer orientation, ultrapure product quality, innovative capability and a lasting special relationship of trust with our regular customers are the key success factors for this long-established company, which has its headquarters in Emmerthal, Lower Saxony, Germany.

Lower Saxony ...

Demonstrating resilience and continuity, the company masters the constant fluctuations in the markets and the ever-changing demands on products and services. New areas of application for mineral salts are constantly being developed in the research departments. In addition, Dr. Paul Lohmann® has also had a production site in Lüneburg since 1972. The supporting of young talent is also an important concern for the company. A variety of interesting training opportunities are available at the Emmerthal and Lüneburg sites.

... and the world

There is another research and development laboratory in Bratislava, Slovakia. Here, an international research team is constantly working on new developments. With its own sales companies in Singapore, New York (USA), Eindhoven (Netherlands) and Evry (France), the company can respond quickly and appropriately to the regional requirements in the markets of Europe, America and Asia. In addition, an international network of representatives have been cultivated over decades to look after the customers of Dr. Paul Lohmann® worldwide.

german manufacturer
— — — since 1886

1888

Encouraged by the company's success, Dr. Paul Lohmann launched the production of calcium and magnesium preparations in 1888. He expanded his product range continuously, so that by around 1900 the company had already developed into a well-known supplier of mineral salts.



- ◆ Medium-sized, family-owned manufacturer and developer of mineral salts
- ◆ More than 400 different salts in a total of over 7,000 different specifications on request
- ◆ Worldwide network of sales companies and agents

Our driving Passion

Dr. Paul Lohmann® is driven by the areas of research, development and innovation for which German engineering is traditionally renowned. Above and beyond the production of mineral salts, the company has the capability to adjust many chemical and physical parameters to provide beneficial characteristics which can be used to meet ever changing market needs. By developing new markets, the company consolidates its leading position against the competition and secures the jobs of its employees, both regionally and globally.

Our strengths

The company's core competence lies in the production of mineral salts, as well as the associated research and development. The chemical and physical properties of the products are developed and controlled with an extensive range of instruments. As a GMP-, DIN EN ISO 9001:2015- and FSSC 22000/ISO 22000-certified producer of mineral salts, Dr. Paul Lohmann® produces in qualities according to current pharmacopoeias and food guidelines.

We produce high-purity mineral salts

The company offers specially controlled, ultrapure product qualities. Dr. Paul Lohmann® follows current pharmacopoeias in the manufacture of pharmaceutical products. For example, products that are particularly low in endotoxins are used in injection or infusion solutions. Dr. Paul Lohmann® always stays up to date in the development and production of food supplements, food additives or products for industrial applications.



1930


In 1930, the company founder handed over his business to his son, Rudolf Lohmann, who developed the company into a solid and globally active company with several dozen employees by the end of the thirties. He proved his shrewdness by developing into international markets and investing in the development of a global network.



- ◆ DIN EN ISO 9001:2015
- ◆ FSSC 22000/ISO 22000
- ◆ GMP (Good Manufacturing Practice)

1955

The company's rapid growth in the fifties was the reason for its move—ongoing production—to a former soap factory in Emmerthal in 1955.

- 
- ◆ Adaptation of chemical and physical product characteristics
 - ◆ Tailor-made, innovative solutions in response to customer demand
 - ◆ Joint product and application development in collaboration with customers

Tailor-made Solutions for state-of-the-art Applications



Chemical properties

- ◆ Solubility
- ◆ pH value
- ◆ Concentration
- ◆ Assay
- ◆ Color
- ◆ Water content
- ◆ Flowability
- ◆ Purity



Microencapsulation

- ◆ Avoidance of interaction with other ingredients, e.g. fat oxidation
- ◆ Excellent flavor masking properties
- ◆ Optimum flow characteristics and dosability
- ◆ Micro2 = micronized + micro-encapsulated mineral salts



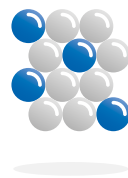
Particle size engineering

Granules

- ◆ Excellent flowability
- ◆ Reduced dust
- ◆ Minimized material agglomeration

Granules for Direct Compression

- ◆ Optimum tablet compression characteristics
- ◆ Improved dosage
- ◆ Only small amounts of binders are necessary



Triturations

- ◆ Easy dosage
- ◆ Safe handling
- ◆ Homogeneous distribution of trace elements
- ◆ Reduced toxicity
- ◆ Inert carriers



Premixes

- ◆ Simple and safe handling in the process
- ◆ Homogeneous mixture
- ◆ Defined mixing ratio



Micronization

- ◆ Improved dispersion behavior in suspensions, resulting in improved homogeneity
- ◆ Reduced sedimentation
- ◆ Improved mouthfeel
- ◆ Potential increase in bioavailability



Bulk density variation

- ◆ Optimized ratio between weight and volume
- ◆ Ultralight to heavy qualities available



Solutions

- ◆ Energy and resource efficient
- ◆ Organic solvent-free - water based
- ◆ Easier processing

1961

Dr. Ekkehard Lohmann, grandson of the company founder, had already taken over the reins at the company in 1950 and became co-owner in 1961.

1972

In 1972, another production site was established in Lüneburg, Lower Saxony. Conveniently located on the outskirts of Hamburg, here the company concentrated mainly on the production of iron and magnesium salts.

Mineral Salts are needed everywhere

Pharmaceutical applications

- ◆ Active Pharmaceutical Ingredients (API)
- ◆ Excipients
- ◆ Documentation (CEP, ASMF etc.)
- ◆ GMP (Good Manufacturing Practice)

Biopharmaceutical applications

- ◆ Fermentation/cell culture for the production of drug substance
- ◆ Process aids for the purification of drug substance
- ◆ Buffer
- ◆ Excipients

Food supplements industry

- ◆ Mineral salts for a wide variety of dosage forms
 - ◆ Soft gelatin capsules/hard gelatin capsules
 - ◆ Tablets/effervescent tablets
 - ◆ Granulate sticks/powder sticks
 - ◆ Syrup
 - ◆ Drops
 - ◆ Liquid sticks/drink ampules
- ◆ Recommendation in accordance with the current Health Claims Regulation

Food & beverages

- ◆ Mineral salts for use in fortification and as food additives
- ◆ Various application areas
- ◆ End-product-specific mineral salts
- ◆ Continuous market research
- ◆ LomaSalt® product line for low-sodium foods
- ◆ FSSC 22000/ISO 22000

Industrial applications

- ◆ Intensive research and development
- ◆ Large product portfolio in individual qualities
- ◆ Different industrial areas
 - ◆ Metal surface treatment and electroplating
 - ◆ Construction industry
 - ◆ Renewable energy
 - ◆ Coatings/adhesives
 - ◆ Ceramics/glass
 - ◆ Catalysts
 - ◆ Polymers

Cosmetics

- ◆ Mineral salts as active ingredients and excipients
- ◆ Various application areas
 - ◆ Skin care
 - ◆ Hair care
 - ◆ Oral care
 - ◆ Nutricosmetics

Animal feed

- ◆ Certified animal feed producer according to Regulation (EC) 1831/2003
- ◆ FAMI-QS certification

1980

A biological wastewater treatment plant was commissioned at the Emmerthal site.

1994

Both production sites gained GMP certification. Good Manufacturing Practice provides a guideline for quality assurance in production processes and environment when producing active ingredients and excipients for pharmaceutical use.



- ◆ Broad product range
- ◆ Adaptation of chemical and physical parameters
- ◆ Customer-specific product modifications



We take on Responsibility

Dedicated to man and nature ...

As a manufacturer of mineral salts, Dr. Paul Lohmann® is committed to protecting the environment. That's why the company has taken many sustainable steps to protect nature and the environment. Any wastewater produced is thoroughly cleaned in our own wastewater treatment plant. CO₂ emissions are kept to a minimum. The waste heat generated during production is largely recovered and reused in other processes. All measures are under constant further development to keep up to date with environmental protection practice.

Dr. Paul Lohmann® is a partner in the chemical industry's "Responsible Care" initiative, which promotes commitment in the areas of environment, safety and health over and beyond the legal requirements. All employees bear individual responsibility for this program and the resulting corporate environmental policy. Our introduction of the energy management system (EnMS) DIN EN ISO 50001 underlines the company's environmental credentials. The aim of this measure is to continuously improve the use of energy.

Who wouldn't want to work here?

Dr. Paul Lohmann® is always looking for committed staff. Individual training and development opportunities, respect and performance-based pay are key parts of our corporate philosophy. The company has been firmly rooted in the Hamelin-Pyrmont district for four generations and also plays its part in the community as a training provider. Emmerthal is located in Weserbergland nature reserve and in the triangle formed by the towns of Hamelin, Bad Pyrmont and Bodenwerder, and has a lot to attract new citizens to the area. There are good connections (freeway or light rail) to the state capital, Hanover, which has a rich cultural life, making it difficult to choose between a visit to the concert hall, theater, cinema or opera house.

- ◆ Partner in the "Responsible Care" initiative
- ◆ DIN EN ISO 50001 Energy Management System
- ◆ Sedex member
- ◆ Highly-developed sense of social responsibility as a family-owned business

1998

Since 1998, Jürgen Lohmann, great-grandson of the company founder, has been at the helm of the company, with two German production sites, two research laboratories and four international sales companies.

1999

Dr. Uwe Günther and Torsten Cuno joined the company as managing directors. Today, Dr. Paul Lohmann® produces mineral salts for the pharmaceutical, food supplement and food industries, as well as numerous technical industries.



2004

Both production sites were certified according to DIN EN ISO 9001.

2006

Opening of sales companies in Singapore and New York (USA).

Product Portfolio

Mineral Salts

Aluminium

Aluminium Acetate
Aluminium Acetotartrate
Aluminium Hydroxide Acetate
Aluminium Citrate
Aluminium Gluconate
Aluminium Lactate
Aluminium Nitrate
Aluminium Sulfate
Aluminium Potassium Sulfate

Ammonium

Ammonium Acetate
Ammonium Adipate
Ammonium Citrate
Ammonium Formate
Ammonium Lactate
Ammonium Oxalate
Ammonium Tartrate
Ferric Ammonium Citrate
Ferric Ammonium Oxalate
Ferric Ammonium Sulfate
Ferrous Ammonium Sulfate

Calcium

Calcium Acetate
Calcium Bisglycinate
Calcium Carbonate

Calcium Chloride
Calcium Citrate
Calcium Citrate Malate
Calcium Copper EDTA
Calcium Disodium EDTA
Calcium Formate
Calcium Fumarate
Calcium Gluconate
Calcium Glycerophosphate
Calcium Hydroxide
Calcium Lactate
Calcium Lactate PLUS
Calcium Lactate Gluconate
Calcium Lactobionate
Calcium Malate
Calcium Nitrate
Calcium Oxalate
Calcium Hydrogen Phosphate
Calcium Phosphate
Calcium Phospholactate
Calcium Propionate
Calcium Saccharate
Calcium Stearate
Calcium Sulfate
Calcium Tartrate

Copper

Copper(II) Acetate
Copper(II) Bisglycinate

Copper(II) Hydroxide Carbonate
Copper(II) Citrate
Copper(II) Sodium Citrate
Copper(II) Calcium EDTA
Copper(II) Formate
Copper(II) Fumarate
Copper(II) Gluconate
Copper(II) Glycero-phosphate
Copper(II) Oxalate
Copper(II) Pyrophosphate
Copper(II) Sulfate
Copper(II) Tartrate

Iron

Iron, carbonylic
Iron, electrolytic
Iron, reduced
Ferric Albuminate
Ferrous L-Ascorbate
Ferrous Benzoate
Ferrous Bisglycinate
Ferrous Carbonate saccharated
Ferric Subcarbonate
Ferric Choline Citrate
Ferric Citrate
Ferrous Citrate
Ferric Ammonium Citrate
Ferric Manganese(II) Citrate
Ferric Sodium Citrate
Ferrous Sodium Citrate
Ferric Sodium EDTA
Ferrous Fumarate
Ferrous Gluconate
Ferric Glycerophosphate
Ferrous Lactate
Ferrous Oxalate
Ferric Ammonium Oxalate
Ferrous Sodium Oxalate

Ferric Peptonate
Ferric Phosphate
Ferric Phosphate, soluble
Ferrous Phosphate
Ferric Polymaltose Complex
Ferric Pyrophosphate
Ferric Pyrophosphate, soluble
Ferric Sodium Pyro-phosphate
Ferric Saccharate
Ferrous Succinate
Ferric Sulfate
Ferrous Sulfate
Ferric Ammonium Sulfate
Ferrous Ammonium Sulfate
Ferrous Glycine Sulfate
Ferric Subsulfate
Ferric Tartrate
Ferrous Tartrate

Lithium

Lithium Acetate
Lithium Citrate
Lithium Sulfate

Magnesium

Magnesium Acetate
Magnesium L-Ascorbate
Magnesium DL-Hydrogen Aspartate
Magnesium L-Hydrogen Aspartate
Magnesium Aspartate PLUS
Magnesium Bisglycinate
Magnesium Carbonate
Magnesium Chloride
Magnesium Citrate
Magnesium Citrate Malate

2008

By opening its new RDA* laboratories, the company quintuples its laboratory capacity. One focus of the developments lies in the area of dietary supplements and active pharmaceutical ingredients.

* RDA = research, development and application technology

2016

Opening of sales companies in Eindhoven (The Netherlands) and Evry (France).

Magnesium Hydrogen Citrate

Magnesium Dicitrate

Potassium Magnesium Citrate

Magnesium Formate

Magnesium Fumarate

Magnesium Gluconate

Magnesium Glutamate

Magnesium Glycerophosphate

Magnesium Hydroxide

Magnesium Lactate

Magnesium Malate

Magnesium Nitrate

Magnesium Oxalate

Magnesium Oxide

Magnesium Peroxide

Magnesium Phosphate

Magnesium Hydrogen Phosphate

Magnesium Propionate

Magnesium Stearate

Magnesium Sulfate

Magnesium Tartrate

Magnesium Trisilicate

Manganese

Manganese(II) Acetate

Manganese(II) Carbonate

Manganese(II) Citrate, soluble

Manganese(II) Gluconate

Manganese(II) Glycero-phosphate

Manganese(II) Lactate

Manganese(II) Phosphate

Manganese(II) Pyrophosphate

Manganese(II) Sulfate

Potassium

Potassium Acetate

Potassium Adipate

Potassium DL-Hydrogen Aspartate

Potassium L-Hydrogen Aspartate

Potassium Benzoate

Potassium Carbonate

Potassium Bicarbonate

Potassium Chloride

Potassium Citrate

Potassium Magnesium Citrate

Potassium Formate

Potassium Fumarate

Potassium Gluconate

Potassium Glycero-phosphate

Potassium Lactate

Potassium Malate

Potassium Oxalate

Potassium Phosphate

Potassium Propionate

Potassium Sulfate

Potassium Aluminium Sulfate

Potassium Tartrate

Potassium Sodium Tartrate

Selenite

Sodium Selenite

Sodium

Sodium Acetate

Sodium Diacetate

Sodium Adipate

Sodium L-Aspartate

Sodium Benzoate

Sodium Carbonate

Sodium Bicarbonate

Sodium Citrate

Ferric Sodium Citrate

Ferrous Sodium Citrate

Ferric Sodium EDTA

Calcium Disodium-EDTA

Sodium Formate

Sodium Fumarate

Sodium Gluconate

Sodium Glycerophosphate

Sodium Beta-Glycero-phosphate

Sodium Lactate

Sodium Malate

Sodium Oxalate

Ferric Sodium Oxalate

Sodium Phosphate

Sodium Propionate

Sodium Pyrophosphate

Ferric Sodium Pyro-phosphate

Sodium Selenite

Sodium Succinate

Sodium Sulfate

Sodium Tartrate

Sodium Hydrogen Tartrate

Potassium Sodium Tartrate

Strontium

Strontium Acetate

Strontium Citrate

Strontium Lactate

Strontium Oxalate

Zinc

Zinc Acetate

Zinc L-Ascorbate

Zinc DL-Hydrogen Aspartate

Zinc L-Hydrogen Aspartate

Zinc Bisglycinate

Zinc Hydroxide Carbonate

Zinc Citrate

Zinc Gluconate

Zinc Glycerophosphate

Zinc Lactate

Zinc Malate

Zinc Oxalate

Zinc Oxide

Zinc Peroxide

Zinc Pyrophosphate

Zinc Stearate

Zinc Sulfate

Various

Calamine

Glycerophosphoric Acid

Salt of Ems

Salt of Karlsbad

Triturations

Chromium(III) Chloride 6-hydrate in Calcium Carbonate Carbonate

Chromium(III) Chloride 6-hydrate in Maltodextrin

Potassium Iodate in Calcium Carbonate

Potassium Iodate in Tricalcium Phosphate

Potassium Iodide in Maltodextrin

Potassium Iodide in Sodium Citrate

Sodium Molybdate 2-hydrate in Calcium Carbonate

Sodium Molybdate 2-hydrate in Maltodextrin

Sodium Selenite in Calcium Carbonate (Selohvita)

Sodium Selenite in Calcium Carbonate

Sodium Selenite in Sodium Citrate

2017

Dr. Paul Lohmann® was awarded the FSSC 22000/ISO 22000 certificate. This important certification for the food industry business unit represents an investment in the future.

2019

Change of corporate form. The new company name is Dr. Paul Lohmann GmbH & Co. KGaA

Dr. Paul Lohmann GmbH & Co. KGaA

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