

Fe

Zn

Mg

**Salts are
our Life**

Ca

K



Dr. Paul Lohmann[®]

High value mineral salts

www.lohmann-minerals.com



“The whole is
more than the
sum of its parts.”

Aristoteles





Dr. Paul Lohmann® management f.l.t.r.: Jürgen Lohmann, Dr. Frank Lauderbach, Torsten Cuno



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!

We manufacture the broadest portfolio of Mineral Salts for the use in a variety of applications. We’ve been producing these special Salts for over 135 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, industrial applications 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. We can proudly claim to be the worldwide leading innovation partner.

We gladly take on the challenges—worldwide.

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

Jürgen Lohmann Frank Lauderbach Torsten Cuno



1886



On October 1, 1886, **Dr. Paul Lohmann** founds his company on the premises of a small, abandoned chemical factory in the town of Hamelin. He starts by producing reduced Iron (Ferrum reductum) for treating iron deficiency disorders.

1998
1999



Jürgen Lohmann, great-grandson of the company founder, is in charge of the company's assets since 1998. One year later, **Dr. Uwe Günther** and **Torsten Cuno** join the company as managing directors.

2024



Frank Lauderbach succeeds Dr. Uwe Günther as managing director for chemistry and technology.

Where Tradition meets Innovation



Consistent and flexible

We are a medium-sized, family-owned and worldwide leading company that manufactures and develops specialty Mineral Salts. Our product range now includes more than 400 different Salts in a total of over 7,000 different specifications. We manufacture Mineral Salts according to GMP (Good Manufacturing Practice) and in line with international food and pharmaceutical standards. Our production facilities are certified according to DIN EN ISO 9001 and FSSC 22000/ISO 22000.

Development and advice

Development, consulting and service all go hand-in-hand with us. Our research departments develop products suitable for the special applications and requirements of our customers. On request, we can offer our 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 our 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 our company's philosophy for more than 135 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 us, with our headquarters in Emmerthal, Lower Saxony, Germany.

Lower Saxony ...

Demonstrating resilience and continuity, we master 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 our research departments. In addition, we operate a production site in Lueneburg since 1972. Supporting young talents is also an important concern for us. We offer a variety of interesting training opportunities at our Emmerthal and Lueneburg sites.

... and the world

We run an additional research and development laboratory in Bratislava, Slovakia, where an international research team is constantly working on new developments. With our own sales companies and staff in Singapore, New York (USA), Eindhoven (Netherlands), Lieusaint (France), São Paulo (Brazil) and Poznan (Poland), we can respond quickly and appropriately to the regional requirements in the markets of Europe, America, and Asia.

In addition, we have cultivated an international network of representatives over decades to serve our customers worldwide.

german manufacturer
— — — since 1886

1972



In 1972, another **production site** is founded in **Lueneburg** in Lower Saxony. In a favorable location close to the arterial roads of Hamburg, the factory focuses mainly on the production of Iron and Magnesium Salts.

2005



In 2005, we open an own subsidiary in **Singapore**, which coordinates business in the Asian region. We also have our own subsidiary in the state of **New York** since 2005.



Your Added Value

- ◆ **Innovation partner**
New development from trends
- ◆ **Reliability**
Consistent high product quality
Global presence
- ◆ **Sustainability**
Social, product and
supply chain responsibility

2015
2016



In 2015, we open a **sales office in Eindhoven**. The colleagues are responsible for our customers in Benelux. One year later, the **sales office in Paris** is opened. The colleagues are responsible for our customers in France.

2024



Sales activities in Poland and Brazil are established by our own local sales teams.

Our driving Passion



We are driven by the areas of research, development, and innovation for which German engineering is traditionally renowned. Above and beyond the production of Mineral Salts, we have 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, we consolidate our leading position against the competition and secure the jobs of our employees, both regionally and globally.

Our strengths

Our core competence lies in the production of Mineral Salts as well as the associated research and development. The chemical and physical properties of our products are developed and controlled with an extensive range of instruments. As a GMP-, DIN EN ISO 9001-, and FSSC 22000/ISO 22000-certified manufacturer of Mineral Salts, we produce in qualities that meet current pharmacopoeias and food guidelines.

We produce high-purity Mineral Salts

We offer specially controlled, ultrapure product qualities. We follow current pharmacopoeias in the manufacture of pharmaceutical products. For example, products that are particularly Low in Endotoxins are used in injection or infusion solutions. We always stay up to date in the development and production of food supplements, food additives or products for industrial applications.



1994



First-time **GMP certification of both production sites**. Good Manufacturing Practice provides a guideline for quality assurance in production processes and environment, when producing active ingredients and excipients for pharmaceutical use. This certification is continuously renewed.

2004



Both production sites are **certified to DIN EN ISO 9001** for the first-time. This certification is continuously renewed.



Your Added Value

- ◆ **Innovation partner**
New development from trends
- ◆ **Reliability**
Consistent high product quality
- ◆ **Efficiency**
Application know-how

2017



We receive the **FSSC 22000/ISO 22000** certificate for the first time. This important certification for the food division is an investment in the future. This certification is continuously renewed.





Your Added Value

- ◆ **Time saving**
Product modification
- ◆ **Innovation partner**
Tailor-made products
- ◆ **Efficiency**
One-stop shop

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



2005  Commissioning of a **new granulation plant**. With this new production plant, we are expanding the range of grain sizes available in the upper range.

2008  With the opening of our **new RDA* laboratories**, we increase its laboratory capacity fivefold. One focus of the developments is in the areas of food supplements and active pharmaceutical ingredients.

* RDA = research, development and application technology

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
- ◆ Buffers
- ◆ 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 the use in fortification and as food additives
- ◆ Various application areas
- ◆ End-product-specific Mineral Salts
- ◆ FSSC 22000/ISO 22000

Industrial applications

- ◆ Lohtragon®—brand for high performance metal salt range for industrial applications
- ◆ Large product portfolio in individual qualities
- ◆ Different industrial areas
 - ◆ Automotive
 - ◆ Biotechnology
 - ◆ Catalysts
 - ◆ Ceramics & glass
 - ◆ Energy storage
 - ◆ Polymer additives
 - ◆ Surface treatment
 - ◆ And more

Cosmetics

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

2018



DPL-BioPharm products are launched, which are developed specifically for biopharmaceutical applications. In the same year, the new GMP-certified production plant for the manufacture of low endotoxin products is taken into operation.

2021



Introduction of the Lohtragon® brand
We synergize our high-performance metal salt range for industrial applications under the new Lohtragon® brand.



Your Added Value

- ◆ **Flexibility**
Tailor-made products
New development from trends
- ◆ **Efficiency**
Application know-how
- ◆ **Reliability**
Safe products



Sustainability Commitment



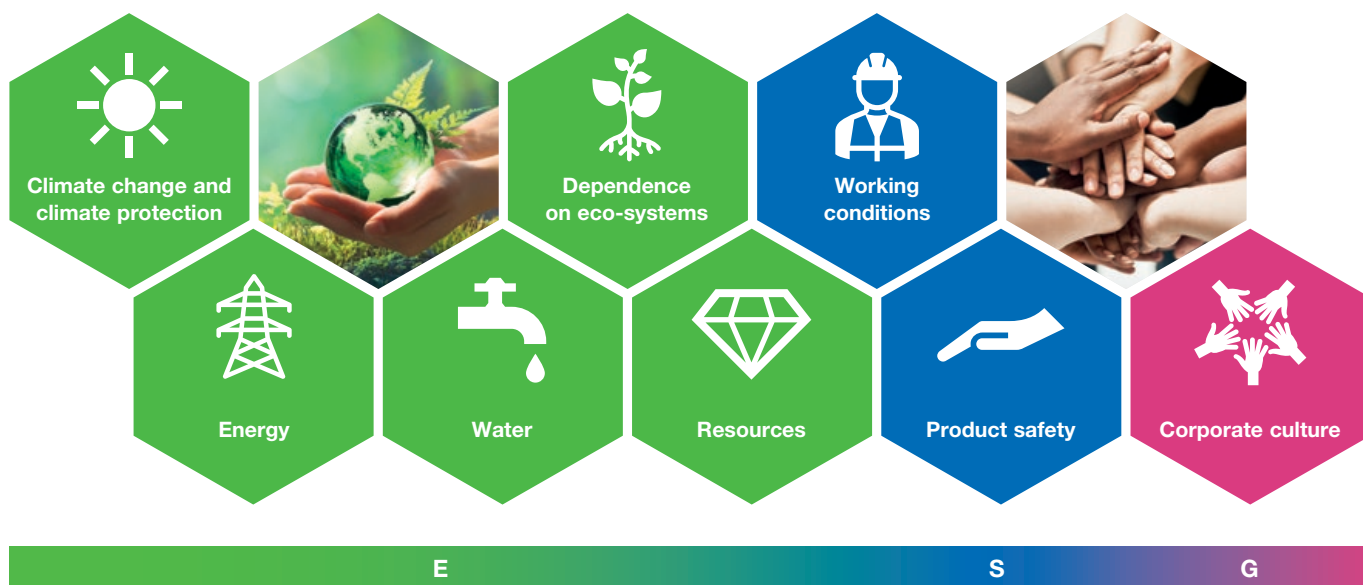
“Do not live today at the expense of future generations” (according to Brundtland, 1987)

As a family-run company in the 4th generation sustainability is ever since deeply rooted in the companies DNA. Today, we view sustainability as a value proposition and develop product solutions that should offer a clear added sustainability value. For us, sustainability is a key driver of innovation.


Environmental, social and corporate governance aspects are already considered in our investment decisions while maintaining joint success. In doing so, we consider the expectations of our stakeholders, particularly our customers,

employees, and the regions where our sites are located to ensure that our initiatives are both relevant and meaningful. Sustainability goals and measures are aligned with our key focus areas.

Climate protection, the biggest challenge in our modern, global world, is clearly a joint task. It is our shared responsibility to support our customers in the best possible way to achieve their climate goals to protect future generations.



2014  Introduction of the **energy management system** in accordance with **DIN EN ISO 50001**. This certification is continuously renewed.

2017  We start with the sustainability assessment by EcoVadis. Since 2021, we are the holder of the **EcoVadis Gold Medal**.



Your Added Value

- ◆ **Integrated ESG-management**
Environmental and social protection
Good governance in our value chain
- ◆ **Risk minimization**
Stable, responsible supply chains
- ◆ **Innovation partner**
New development from trends



2018



Sedex Audit

Our ethical standards and environmental aspects of our activities are regularly assessed by an external auditor in a **Social Compliance Audit**, the so-called SMETA 4-Pillar-Audit, according to **Sedex** requirements. This certification is continuously renewed.

2023



We have published our first **sustainability report to the DNK (German Sustainability Code) platform.**

The sustainability efforts are also visible with the installation of charging points for electric vehicles and electric bicycles at the locations in Emmerthal and Lueneburg as well as a solar carport and the new wastewater treatment plant in Emmerthal.

Product Portfolio of Mineral Salts



Aluminium

Aluminium Acetate
Aluminium Citrate
Aluminium Hydroxide
Aluminium Lactate
Aluminium Nitrate
Aluminium Phosphate
Aluminium Sulfate
Aluminium Potassium Sulfate

Ammonium

Ammonium Acetate
Ammonium Adipate
Ammonium Citrate
Ammonium Formate
Ammonium Lactate
Ammonium Oxalate
Ammonium Sulfate
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 Gluconate

Calcium Glycerophosphate
Calcium Hydroxide
Calcium Lactate
Calcium Lactate PLUS
Calcium Lactate Gluconate
Calcium Malate
Calcium Nitrate
Calcium Oxalate
Calcium Hydrogen Phosphate
Calcium Phosphate
Calcium Phospholactate
Calcium Propionate
Calcium Saccharate
Calcium Stearate
Calcium Sulfate
Calcium Tartrate

Chromium

Chromium(III) Chloride

Copper

Copper(II) Acetate
Copper(II) Bisglycinate
Copper(II) Hydroxide Carbonate
Copper(II) Citrate
Copper(II) Sodium Citrate
Copper(II) Calcium EDTA
Copper(II) Gluconate
Copper(II) Oxalate
Copper(II) Sulfate

Iron

Iron, electrolytic
Iron, reduced
Ferrous L-Ascorbate
Ferrous Bisglycinate
Ferrous Carbonate, saccharated

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
Ferric Nitrate
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 Pyrophosphate
Ferric Saccharate
Ferrous Succinate
Ferric Sulfate
Ferrous Sulfate
Ferric Ammonium Sulfate
Ferrous Ammonium Sulfate
Ferrous Glycine Sulfate
Ferric Sub sulfate

Lithium

Lithium Acetate
Lithium Citrate
Lithium Sulfate

Magnesium

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

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 Taurate
Magnesium Trisilicate

Manganese

Manganese(II) Acetate
Manganese(II) Bisglycinate
Manganese(II) Carbonate
Manganese(II) Citrate, soluble
Manganese(II) Gluconate
Manganese(II) Glycerophosphate
Manganese(II) Lactate
Manganese(II) Phosphate
Manganese(II) Pyrophosphate
Manganese(II) Sulfate

Potassium

Potassium Acetate
Potassium DL-Hydrogen Aspartate
Potassium L-Hydrogen Aspartate
Potassium Benzoate
Potassium Carbonate
Potassium Bicarbonate
Potassium Chloride
Potassium Citrate
Potassium Magnesium Citrate
Potassium Formate
Potassium Gluconate

1926



Patent for soluble Calcium compounds

On November 1, 1926, we obtain a patent for "Medical preparations with soluble Calcium compounds" from the German State Patent Office under the brand name "Lohmanna".

1962



Patents for the Production of Metal Hydroxides and Metal Silicates

We register a patent for producing metal hydroxides as an important prerequisite for further development work.

Potassium Glycerophosphate
 Potassium Lactate
 Potassium Malate
 Potassium Oxalate
 Potassium Phosphate
 Potassium Propionate
 Potassium Sulfate
 Potassium Aluminium Sulfate
 Potassium Tartrate
 Potassium Sodium Tartrate

Sodium

Sodium Acetate
 Sodium Diacetate
 Sodium L-Aspartate
 Sodium Benzoate
 Sodium Carbonate
 Sodium Bicarbonate
 Sodium Carboxyglycinate
 Sodium Chloride
 Sodium Citrate
 Ferric Sodium Citrate
 Ferrous Sodium Citrate
 Sodium EDTA
 Ferric Sodium EDTA
 Calcium Disodium-EDTA
 Sodium Formate
 Sodium Fumarate
 Sodium Gluconate
 Sodium Glutamate
 Sodium Glycerophosphate
 Sodium Beta-Glycerophosphate
 Sodium Lactate
 Sodium Malate
 Sodium Oxalate
 Ferric Sodium Oxalate
 Sodium Phosphate
 Sodium Propionate
 Ferric Sodium Pyrophosphate
 Sodium Selenite
 Sodium Succinate
 Sodium Sulfate
 Sodium Tartrate
 Potassium Sodium Tartrate
 L-Tyrosine Disodium Salt

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 Lactate
 Zinc Malate
 Zinc Oxalate
 Zinc Oxide
 Zinc Peroxide
 Zinc Pyrophosphate
 Zinc Stearate
 Zinc Sulfate

Various

Calamine
 Citric Acid
 Glycerophosphoric Acid
 DL Malic Acid
 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
 Sodium Selenite in Sodium
 Citrate

Your Added Value

- ◆ **Efficiency**
 One-stop shop
 Tailor-made products
- ◆ **Time saving**
 Transparent supply chain
 Selection of packaging
- ◆ **Reliability**
 Consistent high product
 quality

Premix

LomaSalt® 2.0
 LomaSalt® 2.0 Basis
 Premix Alkaline Water
 Premix Energy
 Premix Immune
 Premix 5-Salt – Magnesium
 Premix SiX Mix – Magnesium
 Premix Near Water Beverage
 Premix Sport Isotonic
 Premix Sports and Energy
 Premix Weight Management
 Premix Wellness Immune Beauty
 Premix Women's Health

Lohtragon®

You will find our products
 for industrial applications at
www.lohtragon.com



2009



Integration of product lines taken over from Boehringer Ingelheim. From now on, **Mineral Citrates and Aspartates** from the Boehringer Ingelheim company are being produced and sold by Dr. Paul Lohmann® in Emmerthal. We incorporate existing production systems from Ingelheim and Blanquefort (France) at our site in Emmerthal.

2021



Magnesium Citrate Malate permitted for Food Supplements
 According to the Commission Regulation (EU) 2021/418 amending Directive 2002/46/EC for food supplements our new Magnesium Salt is permitted for the fortification of food supplements.

Dr. Paul Lohmann GmbH & Co. KGaA

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