



Corrosion
Protection

Lohtragon[®]

Crystallizing Solutions

Info Sheet Lohtragon®

Lohtragon® CP: Customized Corrosion Protection Using Metal Salts

Smart Corrosion Inhibition, Tailored to Your Needs

Corrosion threatens durability, safety, and performance across industries. With our **Lohtragon® Corrosion Protection (CP) Approach** we solve these challenges through smart, mineral-based additives – developed jointly with you and customized for your unique application. Backed by lab testing, regulatory awareness, considering sustainability aspects, and over 140 years of salt expertise, we deliver corrosion protection you can trust.

Lohtragon® CP Co-developed for Your System

Custom Corrosion Inhibitors tailored to your needs through close collaboration and proven technical expertise.



Backed by expert knowledge and continuous research and development, we are committed to finding the perfect Lohtragon® CP Additive for your specific needs. From **temporary corrosion protection of e.g. iron-based materials** to **long-term surface treatment**, we address critical needs in industrial applications requiring preservation, easy removal, and eco-consciousness.

Lohtragon® CP: Mineral-Based, Smart, Safe – Our Selected Ingredients



Extensive Salt Portfolio with over 300 Options

Our Lohtragon® portfolio for industrial applications includes over 300 mineral-based salts, available in various grades and physical forms – we cover a huge toolbox for customized corrosion protection.



Flexible, Scalable Production Capabilities

With decades of salt production expertise at Dr. Paul Lohmann® company, we can provide exactly the form you need: powders, granules, microgranules, or liquids. Batch sizes range from lab-scale prototypes to full industrial production – with Made-in-Germany quality.



Tailored to Fit – Not Just Picked Off a Shelf

Every corrosion inhibitor we jointly develop is the result of purposeful selection, formulation testing, and performance validation. Instead of offering a fixed range, we build your solution from the ground up – using our full value chain, from salt synthesis to technical support.



Sustainable and Regulation-Readiness

All Lohtragon® CP products are mineral-based, water-soluble, and declaration-friendly. We proactively address regulatory demands (e.g., GRAS, REACH) and avoid hazardous classifications.

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Proven in Practice: Performance backed by Testing

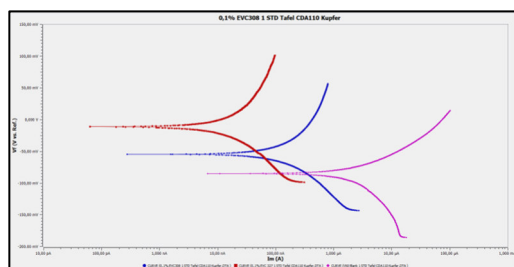
Potentiostatic Testing: Our In-House Core Capability

Our internal application laboratory specializes in potentiostatic corrosion resistance testing, a powerful method to evaluate electrochemical surface reactions and inhibitor effectiveness. This enables us to:

- ◆ Quantify corrosion inhibition behavior on metallic surfaces
- ◆ Visualize passivation performance using Tafel plots and current density data
- ◆ Select and optimize additives based on your material and environment



Our testing range is completed by e.g. **condensation water testing based on ISO 6270** or other aging tests, comparing treated and untreated references.



Example: Copper Surface Test

Potentiostatic results demonstrate clear corrosion current reduction — confirming the effectiveness of Lohtragon® CP additives in passivating copper surfaces.

The **Tafel diagrams** demonstrate the **effectiveness of Lohtragon® CP additives on copper surfaces**. The downward-shifted curve, reflecting lower current densities, indicates **significantly improved corrosion inhibition**.

Case Study: Temporary Corrosion Protection of an Iron-based Material

Iron-based materials are especially vulnerable to corrosion during transportation, storage, or intermediate production stages. Our temporary protection solutions ensure that iron-based materials remain corrosion-free throughout critical phases of the industrial lifecycle, by:

- ◆ Providing an effective barrier against moisture, oxygen, and contaminants.
- ◆ Allowing easy removal or transition to further processing steps.
- ◆ Preserving the quality and appearance of iron surfaces without affecting downstream applications.



The corrosion inhibition effectiveness of selected Lohtragon® CP Additives is demonstrated at low concentrations (1%-solution, dipping for 1 min, drying at 60°C for 15 min) of an iron-based material after **condensation water testing based on ISO 6270**.

Partner with us for Smart and Efficient Corrosion Inhibition: Lohtragon® CP

Lohtragon® CP offers highly effective, eco-friendly corrosion protection additives tailored to your specific needs — delivering increased durability, reduced maintenance costs, and improved operational reliability. Through joint product development and expert support, we create customized additive solutions. Our mineral-based, declaration-friendly, water-soluble additives are compatible with multi-metal systems and various formulation components, ensuring seamless integration without compromising performance, while supporting sustainability goals. Backed by our in-house application lab and potentiostatic corrosion testing, we ensure every solution is thoroughly tested and ready for your demands.

Connect with us and develop your eco-friendly and efficient Lohtragon® Corrosion Protection Additive — the smart choice of corrosion inhibition!

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Lohtragon® CP Corrosion Protection Additives – Efficient and Sustainable

In the mindset of offering innovative corrosion inhibitors, the pilot phase of Lohtragon® CP products considers the below aspects. Special attention is given to the development of a sustainable and efficient corrosion protection additive range, meeting performance requirements, customers' requests and regulatory demands.

Corrosion protection additives

- ◆ Based on balanced formulation of high performance metal salts
- ◆ For multi-metal protection
- ◆ Effective in various application areas

Specific performance requirements

- ◆ Depending on application and final use
- ◆ In-house lab for specific application tests
- ◆ Various test methods

Product properties

- ◆ Available as aqueous solution; concentrates and solids under evaluation
- ◆ pH neutral, non-foaming, odorless, no flash point, good wetting performance, etc.
- ◆ Your requirements!

Application in final formulation

- ◆ One product meeting the various requirements
- ◆ Performing highly effective in protecting metal surfaces
- ◆ Low dosage level

Regulatory aspects

- ◆ GRAS (generally recognized as safe) classification, REACH, no hazardous symbols, no safety- or risk-phrases, etc.

Life cycle assessment / sustainability

- ◆ Environmental impact, incl. easily biodegradable
- ◆ Recyclability and circular economy considerations
- ◆ Carbon footprint evaluation

Contact Us



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Lohtragon® – A Brand of Dr. Paul Lohmann®

For over 135 years, the company Dr. Paul Lohmann has been able to establish and maintain its leading position as an international manufacturer of mineral and metal salts that meet the highest quality standards. The product range includes over 400 different salts, from Aluminum to Zinc, in a total of over 7,000 different specifications. Dr. Paul Lohmann® supplies its specialty salts worldwide to customers in the pharmaceutical industry, food sector, food supplements, cosmetics and – under the Lohtragon® brand – to customers in industrial applications.

Lohtragon® stands for unique competences in manufacturing, optimizing and developing metal salts for a broad variety of industrial market segments. Established in diversity, tailor-made for you, your application and your process - our solution for your challenges!

Established Products

By choosing Lohtragon® products, you benefit from direct manufacturer sourcing and our "Made in Germany" quality and reliability promise.

Joint Developments

From concept phase to tailored product optimization, we are your partner to solve any development challenge.

Expert Services

Rely on services from our application technology, regulatory affairs, logistics, quality departments and more. We fully support you in all areas.