



**Construction
Industry
Admixtures for
Cement**

Lohtragon[®]

Crystallizing Solutions

Info Sheet Lohtragon®

Lohtragon® L90 CI: Lithium-free Accelerators and Retarders for Cement Applications

Having the ability to fine-tune the setting speed of your cement formulation is extremely important to achieve an efficient and cost effective application. Lohtragon® CI (Construction Industry) metal salt products are **designed to deliver**.

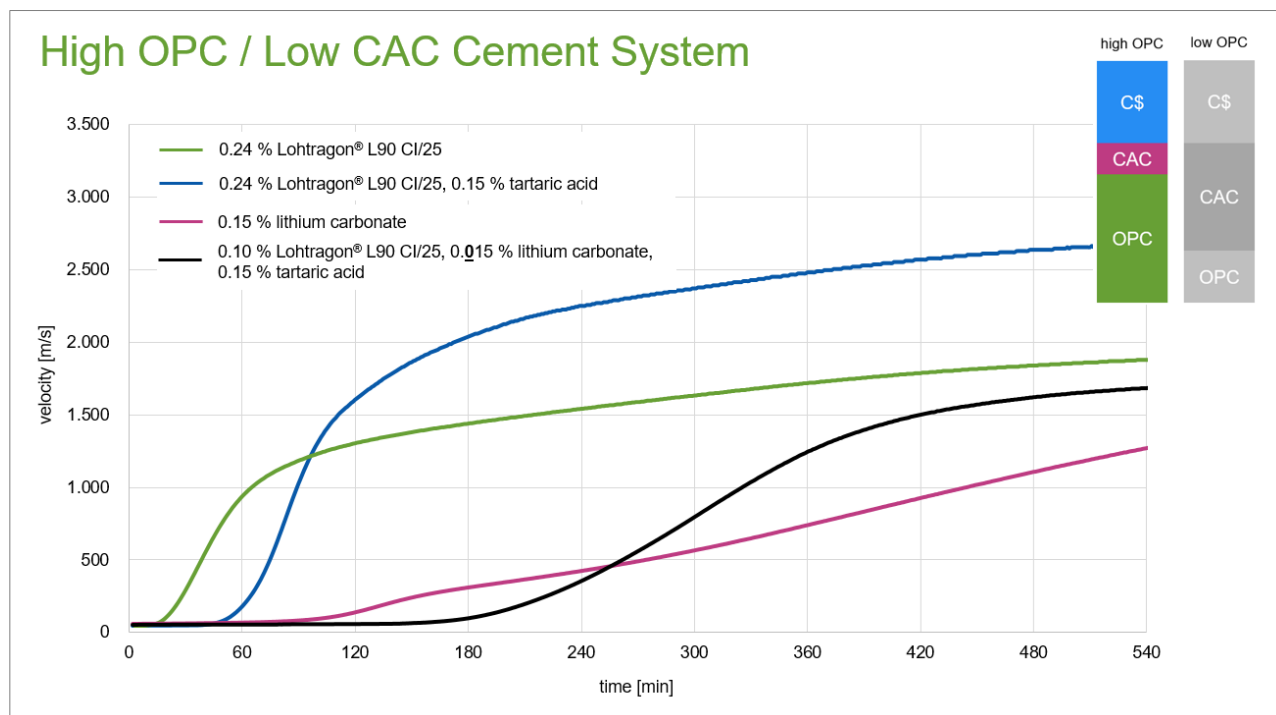
The Lohtragon® CI range was developed for use **as retarders and accelerators in cement and plaster-based systems**. Accelerators and retarders are used in Portland cement containing binders like lime/cement plasters so that the period of plasticity can be adjusted to match your requirements.



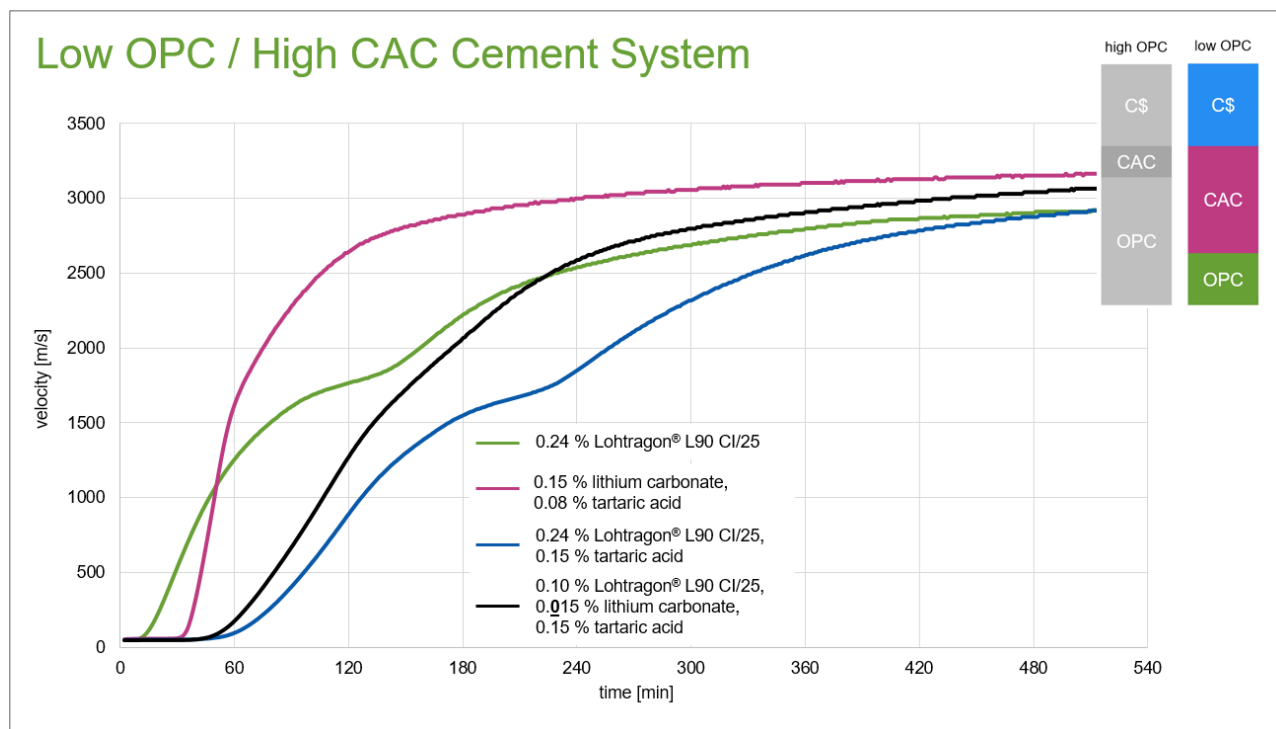
The Lohtragon® CI products are lithium-free metal salt mixtures **manufactured in Germany** that have been tested in-house in our application laboratory for compatibility and comparability relative to standard construction admixtures.

We use **ultrasonic testing equipment** to understand the setting behavior in different formulations and to make adjustments to optimize performances.

Our testing confirms the effectiveness and efficiency of our Lohtragon® L90 CI metal salts in various cement mixtures with ternary binder systems and various OPC content (Ordinary Portland Cement). The following are **typical results** of our Lohtragon® L90 CI/25 accelerator **for both high and low OPC systems**:



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- ◆ Green curves: Lohtragon® L90 CI/25 effectively accelerates high OPC systems
- ◆ Blue curves: The open time can be adjusted
- ◆ Black curves: Lohtragon® L90 CI/25 can also be used in combination with lithium carbonate, reducing its use by 90 %

Lohtragon® L90 CI Benefits

Efficient acceleration/retardation	<ul style="list-style-type: none"> ◆ Lithium-free metal salt mixtures, “Made in Germany” quality and consistency ◆ Efficient acceleration/retardation and dosage compared to standard technologies
OPC Workability	<ul style="list-style-type: none"> ◆ Effective performance in complex ternary binder systems with high and low portland cement content
Processable	<ul style="list-style-type: none"> ◆ Optimized free-flowing properties for optimal handling
Compatible	<ul style="list-style-type: none"> ◆ Compatibility with other accelerators/retarders, e.g. lithium- and calcium-based additives ◆ Compatibility with CEM I-III and OPC
Reformulation required	<ul style="list-style-type: none"> ◆ Dr. Paul Lohmann® supports with its manufacturing expertise, its R&D competence and its in-house application lab, fully respecting your intellectual property

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Lohtragon® CI Base Products

Base Products	Function	Description
Lohtragon® B09	Retarder	powder chem. pure
Lohtragon® L90 CI/20	Retarder	powder chem. pure
Lohtragon® L90 CI/24	Accelerator	powder chem. pure
Lohtragon® L90 CI/25	Accelerator	powder chem. pure

Our experience shows that recommended dosages for our base retarders range between 0.01-0.25 %, with 0.1 % as starting dosage. For our base accelerator Lohtragon® L90 CI/25 the starting dosage is at 0.4 %, with a generally recommended dosage range between 0.01-0.6 %, while we recommend for Lohtragon® L90 CI/24 a maximum of 0.5 %. Your cement is of course unique and results will be different.

We can utilize our in-house laboratories to assist in your reformulation! Further Lohtragon® CI retarders and accelerators are available on request and can be developed to your specific requirements.

Contact

Connect directly with our Lohtragon® experts in our German headquarter.



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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® represents unique competencies in manufacturing, optimization and development of metal salts for a wide variety of industrial market segments. Tailor-made for your application and your process - our solution to 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 R&D, application technology, regulatory affairs, logistics, quality departments and more. We fully support you in all areas.