

Potassium Salts
for PIR Foam
Production



Lohtragon®

Crystallizing Solutions

Enhancing PIR Foam Manufacturing: The Role of Lohtragon® Potassium Salts in Versatile Formulations

Improve Your PIR Foam Formulation Today to Stay Competitive Tomorrow

Elevate your polyisocyanurate (PIR) rigid foam with our Lohtragon® potassium-based trimerization catalysts, highlighting especially our potassium acetates and potassium formates. Benefit from high performing products for superior foam structures and insulation properties, formulation flexibility, process efficiency, eco-friendliness, and more. To stay ahead with your PIR formulation, we also provide preselection assistance in the best matching Lohtragon® quality, customized formulations, and new product developments to ensure your product's success.

[Connect with us](#) and enhance your PIR production with the ideal catalyst solution: **Lohtragon® potassium salts!**

Lohtragon® Potassium Salts as Leading Catalysts for PIR Production



Improved
PIR Foam
Quality



Enhanced
Reaction
Efficiency



High
Performance
Polyol Blends



Broad
Formulation
Flexibility



Sustainability
Benefits

Innovation: Solubilize Lohtragon® Potassium Salts without Water

The ability to solubilize certain of our Lohtragon® potassium salts without water is reflecting ongoing efforts of our R&D team to innovate and adapt to market needs – **a novel approach to PIR rigid foam formulations, potentially serving as a key differentiator in the market.**

New opportunities for the PIR rigid foam industry and future foam developments derive from recent experiments which gave insights into the solubility behavior of potassium-based products when formulated with diethylene glycol (DEG) or monoethylene glycol (MEG) – particularly regarding viscosity and solubility profiles. Our ongoing R&D efforts are focused on leveraging these findings to meet your needs, amongst other innovation projects.

[Reach out to us](#) for further information on our research and further Lohtragon® product developments.

Lohtragon® Catalyst Systems to Highlight: Potassium Acetate and Formate

Are you looking for proven performance effects in the PIR foam like favorable impacts on the reaction process, improved and constant foam quality, and environmental considerations? Start exploring our Lohtragon® catalysts based on potassium acetate and potassium formate.



Potassium acetate | Lohtragon® O02

The balanced reactivity of our [Lohtragon® O02](#), and its related aqueous solution Lohtragon® O52, ensures a highly efficient and controlled polymerization. This leads to the production of high-quality foams with consistent properties, which is vital for manufacturers aiming for product reliability and performance.

Potassium formate | Lohtragon® B71

Our [Lohtragon® B71](#) generally requires low activation energy to initiate the trimerization process. This results in lower processing temperatures, energy savings, and potentially faster production rates, making the production more efficient and sustainable.

The liquid form of both products improves the foams carbon footprint, contributing towards sustainability and adherence to regulatory standards. For more information on this topic, please have a look into our info sheet: [“Sustainability Impulse: Aqueous Solutions and Solids”](#).

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Why Lohtragon® Potassium Salts as Catalysts for the PIR Production?

Specialized catalysts are of central importance for innovations in polymer chemistry. In particular, potassium salts used as trimerization catalysts have gained considerable importance for PIR rigid foam used as efficient insulation material, e.g. in construction and cooling technology. Our potassium based Lohtragon® trimerization catalysts take over various key functions in the polymerization step of rigid foams, leading to several valuable benefits:

1. High-quality foams based on structural advantages

Enhance your PIR rigid foam's structure and insulation with Lohtragon® trimerization catalysts. These potassium-based catalysts ensure a superior balance in gelling and blowing reactions, leading to foams with excellent thermal stability, fire resistance, and insulating properties, suitable for various applications.

2. Maximum process efficiency based on selectivity, reliability and costs

Achieve highest process efficiency with Lohtragon® potassium salts. Their selectivity enables precise trimerization, enhancing chemical reaction control, consistency, and foam homogeneity. Economically beneficial, these salts reduce costs without compromising quality or efficiency.

3. Formulation flexibility and easy incorporation

For seamless integration into foam formulations, ensuring compatibility with the various formulation components, optimal performance, and simplification of the manufacturing processes, choose Lohtragon® potassium salts.

4. Innovation based on product and application versatility

New possibilities in the development of advanced rigid foam products are your target? Challenge our Lohtragon® catalysts based on potassium salts. Their versatility across multiple formulations allows for a wide spectrum of PIR foam characteristics, from soft to highly durable types. Our extensive [Lohtragon® potassium salt portfolio](#) includes a variety of compounds such as acetates, formates, and more, with further customization options available through our advanced R&D services. Whether you need solids, aqueous forms, or solutions diluted in diethylene glycol (DEG) or monoethylene glycol (MEG), we offer tailored solutions to perfectly match your product requirements.

5. Environmental compatibility and safety

Reduce environmental and safety impacts with our Lohtragon® potassium catalysts. Compared to conventional catalyst systems, they are less toxic, require milder conditions, and lead to safer, more energy-efficient production. We are committed to lowering our production and logistics' environmental footprint, providing product carbon footprints (PCF) in line with our sustainability goals and yours.

Zoom into our Lohtragon® Potassium Salt Portfolio

Lohtragon® Type	Used substance	Features	CAS no.
Lohtragon® O02 Type 90	Potassium Acetate, anhydrous	Powder, with food attestation	127-08-2
Lohtragon® O52 Type 20	Potassium Acetate, Solution	70% solution in water	127-08-2
Lohtragon® B71 Type 11	Potassium Formate	Powder, chem. pure	590-29-4
Lohtragon® B91 Type 03	Potassium Formate, Solution	70% solution in water	590-29-4

Additionally we offer potassium salts from aspartes to tartrates: our extensive [Lohtragon® potassium salt portfolio](#).

Your product or quality of interest is not listed? [Contact us!](#) Whether you need solids, aqueous solutions, or solutions diluted in diethylene glycol (DEG) or monoethylene glycol (MEG), we offer customized solutions that perfectly match your application requirements.

Connect with us and Elevate your PIR Production with our Ideal Catalyst



+49 5155 63-5888
contact@lohtragon.com
www.lohtragon.com

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.