

Halogen-Free Fire Retardants and specialty material solutions





J.M. Huber:

A family of solutions

J M. Huber Corporation combines imagination, inspiration and innovation to enhance the performance of thousands of consumer and industrial products across

a variety of industries. One of the largest family-owned companies in America, Huber is built on a tradition of strong customer relationships, high ethical standards and technology leadership.

With more than 4,300 employees in 20 countries and \$3B revenue in 2021, Huber has remained familyowned since our founding by Joseph Maria Huber



HUBER ENGINEERED MATERIALS















Huber's initiatives and programs

The Huber Principles define our culture and align with the core values of the Huber family, ensuring that everything we do is for the benefit of our colleagues, customers and the communities in which we conduct business. We maintain the high standards we have set for ourselves and our Company through the following initiatives and programs:



In our global commitment to community engagement, Huber Helps donates 1% of the Company's operating net income annually toward doing good to ensure we make a significant, collective impact



Our DE&l vision is to foster an inclusive workplace that respects differences and promotes equitable access to opportunity, where every employee around the world feels like they belong and are valued



Since 1999, this ethics program has articulated the standards for emplovee behavior, which are based on the Huber Principles, and helped identify risk areas that workers may come across in their jobs



Huber Principles

As we continue to transform and improve products used around the world, the Huber Principles serve as the foundation for how our employees conduct business.

The Huber family, now in their sixth generation in the US, embraces their responsibility to continue the profitable growth and success of the Company in accordance with these Principles.



As the bedrock of our culture, the Huber Principles inspire employees to support our customers, help one another and ensure that the enterprise remains a positive force in the world for generations to come.

Our employees - including 400 who joined the company in 2021 - are drawn together by Huber's unique culture, working to manufacture products used by millions of people and committing to be a good neighbor in the over 45 communities where we operate.

EH&S Sustainability

World-class safety and environmental performance

Respect for people Great place to work for

honesty, respect, teamwork and recognition.

Ethical Behavior

A company identity that we are all proud of

Excellence

Competitive advantage through customer intimacy and operational excellence



Huber recognized as a US best managed company

J.M. Huber was selected as a US Best Managed Company for the third consecutive year in 2022. Sponsored by Deloitte Private and The Wall Street Journal, the 2022 designees are U.S. private companies that have demonstrated excellence in strategic planning and execution, a commitment to their people and fostering a dynamic, resilient culture, as well as strong financials. The 2022 designees continued to propel their businesses forward by prioritizing purpose, investing in their workforces, and demonstrating their commitment to diversity, equity and inclusion.



Recognizing private company success

Huber Advanced Materials

Huber Advanced Materials, a Strategic Business Unit of J.M. Huber Corporation, is a leading supplier of halogen-free fire retardants, smoke suppressants, thermal management solutions, specialty aluminum oxides, and organic matting agents and carriers. Our materials are used in numerous products, improving the safety of millions of people around the world and protecting our environment.

Our Vision

Leading in innovative and sustainable material solutions.

Our ambition is to be a leader in our markets by providing innovative and sustainable solutions to our customers. While halogen-free fire retardants and specialty material solutions are our core business offerings, we are also expanding into adjacent specialty segments and products.

Our Mission

Winning with our customers and employees by creating and delivering halogen-free fire retardant and specialty material solutions while living the principles of our family business.

We create value-added customer solutions and deliver reliable service to our customers with the right systems and processes in place. We help our customers and employees win by helping them to grow and succeed. And we are proud to be a family-owned business.



Quality and certifications

Our commitment is to never compromise on the quality of our products and services. We empower our people to protect customers and our communities by achieving quality through dedication, passion and leadership. We take great pride in the quality of our specialty solutions, and are committed to superior customer service and technical support. Our quality assurance system consists of efficient process control systems, systematic sampling and analysis of product properties in the production and central laboratories.

Our quality promise:

At Huber, Quality is an integral part of our company policy. An integrated Management System is in place and ensures that quality standards are maintained in all aspects of the company.

World Class Innovation and Customer Support

Our passion and commitment towards innovation is reflected in our vision: Leading in innovative and sustainable material solutions. Huber Advanced Materials is committed to delivering real value to customers and consumers through high-impact solutions, driven by customer insights and deep technical application expertise. Our solutions touch the lives and enhance the safety of millions of people on a daily basis.

Through co-development, we engineer new products and solutions both on a global and regional basis to meet the specific needs and requirements of our customers. Innovation is our foundation to achieve sustainable growth. We capitalize on major megatrends like sustainability, e-mobility, connectivity and urbanization. Our scientists collaborate with universities, research and test institutes and customers to develop new know-how and innovative solutions. We have dedicated resources in place to explore novel applications as growth platforms for the future.

World Class Technical Support and R&D Capabilities

Two world class R&D centers (Fairmount, Georgia, US; and Bergheim, Germany) are setup with fully equipped analytical laboratories, pilot scale laboratories and a pilot plant, offer tailored technical support to our customers. We can provide extensive polymer and powder processing, with broad product evaluation and analytics, such as tests on flammability, thermoplastics, thermosets and wire and cable.

Our ongoing commitment to customer focus and technical service helps us to ensure we are well placed to meet the dynamic needs of customers around the globe, both today and in the future.



Sustainability

uber's Sustainability Strategy aligns with a global set of objectives, the United Nations Sustainable Development Goals, known as the UNSDGs. This globally recognized set of goals is used by leading sustainable companies to substantiate and communicate how their initiatives are part of a worldwide effort to make progress on these critical objectives. Our strategy di-

rectly aligns with four of these goals through our own sustainability objectives. We also positively impact an additional seven UNSDGs through our business practices, policies and procedures. Set to be launched in 2023, Huber's next Sustainability Strategy will also be informed by and aligned with the UNSDGs.



Direct alignment

6 CLEAN WATER AND SANITATION



7 AFFORDABLE A



DECENT WORK AND



12 RESPONSIBLE CONSUMPTION AND PROPULCTION



Positve impacts

3 GOOD HEALTH AND WELL-BEING



5 GENDER



INDUSTRY, INNOVATION



10 REDUCED



11 SUSTAINABLE CITIES AND COMMUNITIES



15 LIFE ON LANE



PEACE AND JUSTICE



In total, about 33% of Huber's 2021 energy usage was derived from renewable sources. Huber's renewable energy sources include solar hydro (water), wind and geothermal.

Huber maintained its commitment to reducing the Company's environmental footprint through operational excellence despite impacts stemming from the ongoing COVID-19 pandemic. The baseline for Huber's Sustainability Strategy is our 2017 energy and water intensity and CO₂ emissions intensity, with the goal of reducing each by 10% by the end of 2022. With respect to the Company's environmental footprint performance, our sustained (rolling 12-month) usage intensity in 2021 relative to the 2017 baseline for three key areas was:



Huber's internal Zero Waste-to-Landfill criteria requires diverting at least 90% of a manufacturing facility's waste from landfills We continue to focus on new ways to eliminate or repurpose our waste streams



Energy usage

+ 2.7 %

There was one administrative NOV with no environmental impact. Huber also had one permit exceedance.

Renewable energy



Our ability to do well as a company allows us to do good in the community. As part of our ongoing commitment to improving today for a better tomorrow, we have pledged to invest 1% of our operating net income in philanthropy and community volunteerism through the Huber Helps initiative.

Huber ver" left from "E means the top assessed garded

Huber improved to a "Silver" level in EcoVadis, up from "Bronze" in 2020, which means we are now among the top 25% of company's assessed by this highly regarded ESG ratings platform. EcoVadis examines all aspects of a company's ESG performance, as well as how a company communicates its progress.





Our Solutions

Huber Advanced Materials has over 40 years of experience in consistently delivering halogen-free fire retardant additives in the highest quality and purity to the polymer industry. Depending on the application, we support our customers in finding the best solution from our broad global portfolio of fine precipitated, direct ground, surface treated and low viscosity aluminum hydroxides and magnesium hydroxides.

With our highly efficient Kemgard® products, we offer a safe, efficient, and sustainable smoke suppressant and fire retardant solution for rigid and flexible PVC applications and continue to innovate with our new Safire™ nitrogen-phosphate technology, specifically suited for PA 6 and PA6.6.

Thermally conductive plastic materials have gained enormous relevance in recent years. Huber Advanced Materials has developed a comprehensive range of Thermal Management solutions. Our Martinal® TM, Martoxid® TM and Magnifin® TM grades are engineered for the most demanding applications and a wide variety of polymeric systems.

The combination of various characteristics, such as chemical purity, degree of calcination and ease of grinding, enables Huber Advanced Materials to produce a wide range of Martoxid® grades used in specialty applications in the ceramics, refractories, polishing and polymer industries. The applications range from ready-to-press powders, grinding media, mill liners and wear-resistant plates to cutting ceramics, wire and fiber

guides and electronic applications to polishing to ceramic coatings in lithium-ion batteries (LIBs coatings).

When it comes to adsorbents for the cleaning and drying of gases, treatment of organic liquids and problem wastewater, our Compalox® activated aluminas are ideally suited. Because of its strong adsorptive and catalytic properties, Compalox® is highly valued also in the production of H₂O₂.

The extremely high surface area of Pergopak® specialty agents provide high matting and effect efficiency to paint and varnishes. Pergopak's unique properties are also used in the agricultural industry as a special carrier with very high absorption capacity and unique release properties.



Product Portfolio and Brands

	Halogen-free fire retardants			Smoke suppressants	Thermal management solutions	Specialty aluminum oxides		organic matting agents and carriers
Material	Aluminum hydroxides (ATH)	Magnesium hydroxides (MDH)	Nitrogen- phosphorus technology	Molybdate- based complexes	ATH/Aluminum oxides/MDH	Calcined aluminum oxides	Compacted activated alu- minum oxides	Urea resin functional particles
Grade	Fine precipitated ATH Ground ATH Fine ground ATH Low viscosity ATH Surface treated ATH White ATH	Premium synthetic MDH Technical grade synthetic MDH Surface treated MDH			Low/medium/ high filling levels Reduced viscosity Surface treated	High soda Low soda Ground Superground		Fine particle size Ultra fine particle size
Brand	Martinal® Hydral® SB Micral® Hymod® Onyx Elite® Martifin® MoldX® HN Hydrad® SpaceRite®	Magnifin® Vertex® Zerogen®	Safire®	Kemgard®	Martoxid® TM Martinal® TM Magnifin® TM	Martoxid®	Compalox®	Pergopak®
Application	Wire & cable Carpet backing Coatings Adhesives & sealants Roofing membranes	Wire & cable Connectors, housings Roofing membranes Plastic pallets and boxes Coatings	Connectors, housings	Wire & cable Pipes, fittings, panels	Adhesives & sealants Lithium-ion batteries	Technical ceramics Polishing & grinding Refractories Particulate filters	H ₂ O ₂ processing Liquid purification Gas cleaning/ drying	Coatings Crop protection Paper
Polymer	Thermosets Thermoplastics (<200°C) Elastomers	Thermoplastics (>200°C) Engineering thermoplastics (e.g., PA6) Elastomers	Engineering thermoplas- tics (e.g., PA66, PBT)	Thermoplastics (e.g., PVC)	Thermosets (epoxies, polyurethanes)			

Thermal

Organic

LET US WORK FOR YOU!

Huber Advanced Materials is a global leader in halogen-free fire retardants, smoke surpressants, thermal management solutions, specialty aluminum oxides and organic matting agents and carriers. We deliver ideal application solutions to enhance the performance, appeal and processing of a broad range of industrial, agricultural and consumer products today. And our innovation, advanced technologies, unique expertise, unsurpassed customer focus and technical know-how give us the edge to keep meeting the dynamic needs of tomorrow.

THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PORPOSE.

Refer to J.M. Huber or its affiliates' Standard Conditions of Sale for the only express warranties applicable to Huber products. Products incorporating Huber products are not warranted by Huber. In no event is Huber liable for consequential damages.

The trademarks listed in this document are used, applied for, or registered as trademarks of the J.M. Huber Corporation in various countries around the world.



Touching lives. Enhancing safety. This is Huber Advanced Materials.



Our global footprint

The Huber Advanced Materials (HAM) SBU is a specialty chemicals business with a global, leading position in the development and production of halogen-free fire retardants and specialty material solutions touching lives and enhancing safety for millions of people around the world.

Americas

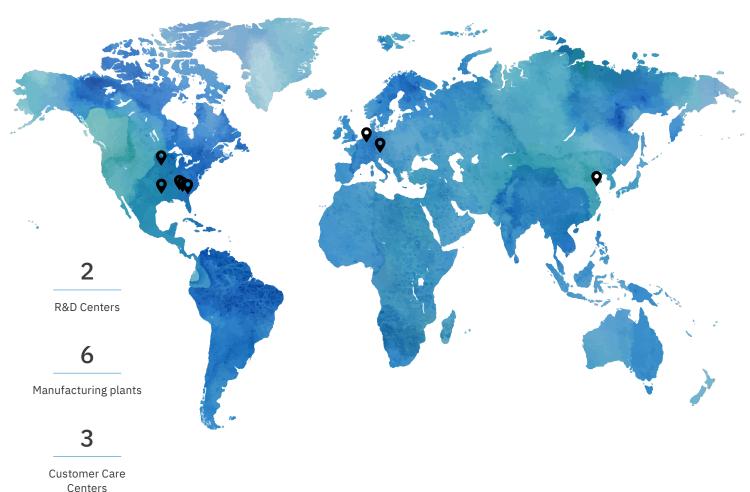
Fairmount, GA Atlanta, GA Kennesaw, GA Marblehead, IL Bauxite, AR

Europe

Bergheim, Germany Breitenau, Austria

Asia Pacific

Qingdao, China





+49 2271 9020 info@martinswerk.com www.martinswerk.com

Europe, Middle East, Africa & India



Huber Advanced Materials

+1 866 564 8237 hubermaterials@huber.com www.hubermaterials.com

Americas

Huber Advanced Materials HEM (Qingdao) Co. Ltd.

+86 532 58792008 hubermaterials@huber.com www.hubermaterials.com

Asia Pacific