**KRAIBURG TPE’s Medical and Healthcare TPEs Support Safe and Ergonomic Wheelchair Component Design**

Mobility impairment can affect both social well-being and mental health. With the aid of assistive technologies like wheelchairs, individuals can regain movement autonomy, rebuild confidence, reconnect with their communities, and reclaim their quality of life.

Recent developments in materials science have led to the use of lightweight yet high-strength compounds in wheelchair design for improved operability.

KRAIBURG TPE, a global TPE manufacturer of a wide range of TPE products and custom solutions for a variety of industries, offers medical-grade [THERMOLAST® H TPE solutions](https://www.kraiburg-tpe.com/en/thermolast-h-healthcare-tpe) that meet and exceed design expectations for assistive devices, providing end users the ergonomics, safety, and durability; and healthcare device manufacturers the material benefits for efficient processing, regulatory compliance, and long-term performance.

**Benefit for user-comfort, better control**

KRAIBURG TPE’s THERMOLAST® H [medical TPE series](https://www.kraiburg-tpe.com/en/medical) has excellent compression set characteristics that allow device elements to maintain their shape and resist pressure, even during prolonged use. The soft-touch, smooth surface of the TPE compounds ensures that wheelchair parts like [handles and grips](https://www.kraiburg-tpe.com/en/thermolastr-h-skin-safe-tpe-high-performance-dermatoscopes) do not cause discomfort or injury, while allowing better control when operating the device.

**Edge in reliable adhesion for multi-component manufacturing**

THERMOLAST® H healthcare TPE material compound feature excellent adhesion to polypropylene (PP) and polyethylene (PE)—two of the most commonly used plastics in medical device housing and structural parts. This property enables efficient multi-component injection molding, simplifying production of composite parts such as buttons, grips, and structural seals while maintaining strong mechanical bonding and design flexibility.

**Gains in color customization for functionality**

The THERMOLAST® H medical TPE range offers outstanding [colorability](https://www.kraiburg-tpe.com/en/coloring), making it ideal for color coding wheelchair functions such as brake and adjustment buttons and power switches. This wheelchair material application enhances accessibility and improves accuracy in identifying and using the correct controls.

**Proven safety compliance**

The THERMOLAST® H medical TPE materials are sterilizable via autoclave (121°C) and ethylene oxide (EtO) processes, an essential advantage for use in sterile environments such as hospitals and clinics. Moreover, these sterile material compounds are free from toxic substances, silicone, latex, PVC, phthalates, and animal-derived ingredients. They comply with medical standard ISO 10993-5 and food-contact regulations, including US FDA CFR 21, Regulation (EU) No. 10/2011, and China GB 4806.7-2023.

**Sustainability from the get-go**

At KRAIBURG TPE, sustainability drives our innovation. Our portfolio includes bio-based TPEs and compounds with post-consumer (PCR) and post-industrial (PIR) recycled content. Selected TPEs are certified under GRS and ISCC PLUS. We also provide Product Carbon Footprint (PCF) data upon request to support sustainability decisions.

We proudly earned the EcoVadis Gold Medal in 2025 and are committed to the Science Based Targets initiative (SBTi), aligning our goals with global climate action.

From reducing emissions to increasing circularity, our sustainable TPEs deliver reliable performance and are available worldwide to support your applications while advancing your sustainability goals.

**Get in touch today** to learn how KRAIBURG TPE can support your sustainability and product development journey.

*Disclaimer: The applications mentioned are illustrative of material capabilities only. Final product suitability and regulatory compliance must be assessed and validated by the customer.*



**(Photo: © 2025 KRAIBURG TPE)**

For high-resolution photography, please contact Bridget Ngang ([bridget.ngang@kraiburg-tpe.com](mailto:bridget.ngang@kraiburg-tpe.com) , +6 03 9545 6301).

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KRAIBURG TPE (www.kraiburg-tpe.com) is a global manufacturer of custom thermoplastic elastomers. KRAIBURG TPE was founded in 2001 as an independent business unit of the KRAIBURG Group and is now the industry's competence leader in the field of TPE compounds. The company's goal is to provide safe, reliable and sustainable products for customer applications. With more than 700 employees worldwide and production sites in Germany, the USA and Malaysia, the company offers a large product portfolio for applications in the automotive, industrial and consumer goods industries, as well as for the strictly regulated medical sector. The established THERMOLAST®, COPEC®, HIPEX® and For Tec E® product lines are processed by injection molding or extrusion and offer manufacturers numerous advantages not only in processing but also in product design. KRAIBURG TPE is characterized by its innovative strength, global customer orientation, customized product solutions and reliable service. The company is ISO 50001 certified at its headquarters in Germany and holds ISO 9001 and ISO 14001 certifications at all its sites worldwide.