**KRAIBURG TPE’s Flame-Retardant TPEs for Internet Hardware Safety**

With internet connectivity becoming indispensable for work, entertainment, and communication, prolonged use of network devices such as modems, routers, and fiber optic terminals stresses hardware. Overheating and wear can lead to malfunctions, short circuits, or even fire hazards.

Proper ventilation and regular maintenance help reduce these risks, but the use of flame-retardant materials in electrical products boosts safety. Devices made with safety-compliant materials withstand high temperatures, prevent ignition, and delay flammability, reducing fire risks. As internet use expands, hardware safety remains a priority for manufacturers and consumers.

**Flame-Retardant TPE for Safety-Critical Applications**

KRAIBURG TPE, a global manufacturer of thermoplastic elastomers, provides high-quality, custom-engineered compounds for applications requiring superior flame resistance.

Its [flame-retardant TPE series](https://www.kraiburg-tpe.com/en/flame-retardant-tpe) is designed for fire-safety and is halogen-free, complying with IEC 61249-2-21 standards, thereby reducing the risk of harmful emissions during combustion.

These compounds have been tested for flammability and fire resistance, achieving a Glow Wire Ignition Temperature (GWIT) of 960°C on a 2 mm-thick sample.

Additionally, the flame retardant TPEs exhibit slow ignition, low smoke emission, and a high Glow Wire Flammability Index (GWFI), indicating strong resistance to ignition and self-extinguishing properties. With temperature stability up to 85°C, these compounds ensure optimal thermal tolerance for appliances and prevent fire spread by inhibiting flaming droplets.

**Sustainability and Design Adaptability**

[KRAIBURG TPE’s compounds](https://www.kraiburg-tpe.com/en) support sustainability in every application and enable in-process recycling for manufacturers.

They exhibit strong adhesion to polyolefins like PP, allowing for easier and more flexible manufacturing, along with good flowability. Available in a wide range of colors, these TPE compounds can also be customized to meet specific [color requirements](https://www.kraiburg-tpe.com/en/coloring).

As such, these materials are particularly valuable for use in housing sensitive electronics, such as internet hardware.

To learn how to offer a more sustainable alternative without compromising on quality or performance:

[Visit KRAIBURG TPE IN CHINAPLAS 2025](https://www.kraiburg-tpe.com/en/chinaplas)

Meet us in Hall 17, booth no: Q71 to explore our innovative and sustainable TPE solutions and connect with industry experts.

Register at <https://forms.office.com/e/dkNkW7mN4a> for your FREE Visitor Pass and Booth appointment! Hurry - availability is limited.

A close-up of a router

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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 698 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.