**Learning aids made child-safe with TPEs**

**KRAIBURG TPE, a recognized global leader in superior TPE compounds, offers a range of THERMOLAST® K TPE compounds for children’s educational toy applications.**

Playing games is a natural form of learning for children. Especially during their formative years, incorporating play with educational toys can maximize a child’s learning potential and aid in the development of a child’s intelligence, problem-solving skills, creativity, emotional and social skills as well as locomotor skills.

Therefore, in recent times, the emphasis on child learning at difference stages of their lives, from a toddler to a teenager, has grown through various educational materials like toys, electronic books and others.

And just like regular toys, educational toys need to be safe from potentially harmful materials such as phthalates, Bisphenol A (BPA), PVC, plasticizers and toxic heavy metals like lead.

Innovative materials such as thermoplastic elastomers (TPEs) allow for safety in toy applications, while not compromising on the design and quality of the products. Owing to the flexibility and variations in colors, TPEs have been widely used to enhance the aesthetic appeal of educational toys for children.

KRAIBURG TPE, a global TPE manufacturer of a wide range of thermoplastic elastomer products and custom solutions for multiple industries, offers the THERMOLAST® K FC/AD1/PS series and FC/CS series that are targeted at educational toys.

**Building blocks of safety**

Not only is exposure from industrial chemicals and synthetic substances used in toys a priority, safety is also an important issue for toys.

For KRAIBURG TPE, safety is not a game of chance. Ensuring safety, the THERMOLAST® K FC/AD1/PS series and FC/CS series are compliant with the global standards for food-contact safety such as the EU 10/2011, the Food and Drugs Administration (FDA) Code of Federal Regulations (CFR), Title 21, and the EN71/3 European safety standard, which make them suitable for application in educational products, even including those dedicated to toddlers.

Additionally, the compounds allow for a soft-touch feel to ensure end products are safe for children to handle.

**Right edge with material advantage**

The THERMOLAST® K FC/AD1/PS has good adhesion with polar thermoplastic such as ABS, PC, PC/ABS and PS, and can be processed through injection molding.

Available in natural colors, this series also imparts a soft and velvety surface feel, making them suitable for products such as interlocking alphabets or soft matt number puzzles, block numbers, toddler’s soft booklets, toy blocks, musical toy buttons, educational robots, pencil holder aids, earphone supports, drawing & writing table pen grips, and more.

Another compound series, the THERMOLAST® K FC/CS series, has excellent compression set, good adhesion to PP and PE; and has good mechanical properties and resilience.

These compounds can be processed through injection molding, as well as extrusion. Available in translucent colored materials that offer varied coloration, this TPE compounds series is a perfect fit for such applications like sealing for interactive tablets and electronic dictionary, earphones, and more.



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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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**About KRAIBURG TPE**

KRAIBURG TPE ([www.kraiburg-tpe.com](http://www.kraiburg-tpe.com)) is a global manufacturer of thermoplastic elastomers. From its beginning in 2001 as a subsidiary of the historical KRAIBURG Group founded in 1947, KRAIBURG TPE has pioneered in TPE compounds, today being the competence leader in this industry. With production sites in Germany, the U.S., and Malaysia, the company offers a broad range of compounds for applications in the automotive, industrial, consumer, and strictly regulated medical sectors. The established THERMOLAST®, COPEC®, HIPEX®, and For Tec E® product lines are processed by injection molding or extrusion and provide numerous processing and product design advantages to manufacturers. KRAIBURG TPE features innovative capabilities as well as true global customer orientation, customized product solutions and reliable service. The company is certified to ISO 50001 at its headquarters in Germany and holds ISO 9001 and ISO 14001 certifications at all global sites. In 2019, KRAIBURG TPE, with 645 employees worldwide, generated sales of 190 million euro.