**TPE as a key material factor for more potent respiratory devices**

**KRAIBURG TPE, a recognized global leader in superior TPE compounds, offers a range of THERMOLAST® M TPE compounds for medical ventilator, respirator and breathing therapy devices applications.**

Technological advancement in respiratory care devices results in enhanced preventive and treatment outcomes. With the increasing global prevalence of respiratory conditions, demand for devices that help the removal of mucus from the airways and aid in improving pulmonary function is also growing. Yet, not all respiratory and breathing therapy devices are created equal and their material composition makes all the difference.

Thermoplastic elastomers materials or TPEs yield properties suited for medical applications, specifically for respirator and breathing therapy devices. Such benefits include low surface friction, good sealing, soft touch, elasticity, durability, and good adhesion that are ideal for use in medical inhaler mask, bag valve mask, mouthpieces, tubing, and connectors for respiratory aids.

KRAIBURG TPE, a global TPE manufacturer of a wide range of thermoplastic elastomer products and custom solutions for multiple industries, offers high-quality custom engineered THERMOLAST® M TPE materials for applications in medical and pharmaceutical devices used in healthcare facilities.

**Sterilizability, safety adherence in medical applications**

The THERMOLAST® M series compounds are sterilizable with superheated steam of 121°C or 134°C,γ-gamma ray treatment (2 x 35 kGy), β-ray (electron beam) treatment (2 x 35 kGy) and EtO gas. Safe to use in medical applications, these compounds are free of latex, PVC, and phthalates, and they are produced without the use of heavy metals.

Additionally, the THERMOLAST® M compounds possess excellent durability, flexibility and high elasticity that are suitable for use in flexible connectors, membranes, seals and valves as well as for breathing therapy devices such as oxygen tube, nebulizer-tubing, aerosol mask, mouthpiece, flexible connectors, portable nebulizer, valve (mouthpiece), and nasal douche (lid & connector).

THERMOLAST® M series has excellent adhesion to a range of polyolefins such as PP, PE, COC and COP; and technical thermoplastics such as ABS, PC, PET-G, as well as polyamides by multi-componentinjection molding. The compounds can be processed through injection molding and extrusion, and have excellent compression set characteristics.

These compounds are usually transparent or translucent in color. However, as KRAIBURG TPE offers services on coloration and color matching to individual color samples, all compounds can likewise be obtained in any given color.

**Evidence of Safety**

The TPE series meets the requirements of the VDI 2017 guideline for medical grade plastics (MGPs) issued by the Association of German Engineers (VDI), as well as the Reach and RoHS standards. The compounds are tested according to DIN ISO 10993-5 Cytotoxicity; DIN ISO 10993-4 Haemolysis, indirect blood contact; DIN ISO 10993-10 Intracutaneous irritation and DIN ISO 10993-11 Acute system toxicity; USP Class VI Extraction.

**Customer satisfaction at the fore**

KRAIBURG TPE strives to maintain the standards of its products by providing a unique service package that focuses on our customer needs in constantly recording manufacturing process in the drug Masterfile (DMF); and by guaranteeing 24-month supply security and purity of our raw materials through the commitment of our suppliers and a dedicated production unit for THERMOLAST® M to ensure the quality, safety and reliability of our TPEs.

****

**(Photo: © 2020 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).

**Follow Us on WeChat**

**A close up of a logo

Description automatically generated**

**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.