

Your reliable partner for the medical & pharmaceutical industries

# THERMOLAST® M





#### Individual TPE: THERMOLAST®

Our thermoplastic elastomers are used in products all over the world. THERMOLAST® represents five strong product lines which are available under the trade names THERMOLAST® K, THERMOLAST® V, THERMOLAST® A, THERMOLAST® W and THERMOLAST® M.

THERMOLAST® compounds are mainly produced on the basis of thermoplastic styrene block copolymers (HSBC) and offer excellent material properties. Many years of experience and thorough development work with customer- and product-specific projects have led to a unique universalism of the THERMOLAST® compound series.

## Product Line THERMOLAST® M

We are a long-established supplier of materials for applications with a low product liability risk for medical engineering. The increasing customer demand made us intensify the development work for it. The result: the product line THERMOLAST® M, which provides a safe and high-quality basis for the products of the customers from the medical and pharmaceutical industries.



THERMOLAST® M has been developed in close cooperation with customers, doctors and nursing staff



## Safety and Quality as a Basic Requirement

THERMOLAST® M satisfies the high demands made by medicine and the pharmaceuticals industries in terms of quality, safety and reliability.

The safety of the compounds for medical applications has been certified to all major medical standards such as DIN ISO 10993-4 "Haemolysis, indirect in human blood", DIN ISO 10993-5 "Cytotoxicity", DIN ISO 10993-10 "Intracutaneous Irritation", DIN ISO 10993-11 "Acute Systemic Toxicity", USP Class VI or USP 661, and extractable studies.



Wide range of applications for THERMOLAST  $^{\mbox{\tiny{\$}}}$  M

Maximum product purity and uniform product quality is guaranteed by a separate production line for THERMOLAST® M. To ensure even higher levels of safety, we do not make use of fillers such as chalk. This results in the additional advantage of our compounds being translucent or transparent – precolored and natural compounds are also available. This means that manufacturing defects can easily be detected during quality control of the final product. All materials belonging to the THERMOLAST® M product group are free of latex and phthalates.



#### A Variety of Possible Applications

The outstanding qualities of the THERMOLAST® M compounds, like the especially low compression set and the excellent adhesion to polyolefins and technical thermoplastics like PC, offer numerous application possibilities:



- Septum,
- Infusion stoppers,
- Closures, etc.

Optimal resealing qualities



- Gaskets,
- Drip chambers,
- Squeeze bottles,
- Luer locks,
- Medical tubing, etc.



- Injection plugs,
- Packagings, etc.

Excellent qualification for direct contact with pharmaceuticals



- Gaskets,
- Flexible connections,
- Valves, etc.

Comfortable haptics Appealing design



#### Much more than only Service: Team Medical

Optimum customer care at the highest level. The concept of service revolves around this premise at our company. To live up to our reputation in this regard, we have our own Medical Team, who is responsible for dealing with all processes involving the THERMOLAST® M portfolio.

#### The THERMOLAST® M Service Package

Our THERMOLAST® M Service Package guarantees a maximum of quality, safety and reliability.

- Comprehensive medical tests: all medical compounds in the portfolio are tested according to ISO 10993-5 "Cytotoxicity". Selected medical compounds are tested according to described medical basic approvals (USP Class VI, USP 661, DIN ISO 10993-4 "Haemolysis, indirect in human blood", ISO 10993-10 "Intracutaneous Irritation" and ISO 10993-11 "Acute Systemic Toxicity")
- Deposited in a Drug Master File
- 100 % formulation and process reliability lead time of at least 24 months with any required change in formulation/ process or new legislation, combined with reliable delivery
- Optimal production standard at a company-owned medical aggregate





## THERMOLAST® M at a glance

- Optimum safety through Medical Service Package
- Simple molding process and short cycle times for injection and co-injection molding and extrusion techniques
- Guarantee of optimum raw material purity
- Long-term raw material availability guaranteed
- Resistance to isopropanol
- No finishing (deburring) required for components
- Compliance with clean room classifications during processing
- 10 Shore A 55 Shore D
- Excellent resealing qualities
- Outstanding mechanical properties
- Optimum compression set
- Precolored compounds available
- Translucent and transparent compounds
- Can be sterilized using the customary methods, EtO gas, superheated steam (134 °C) or gamma ray treatment (2 x 35 kGy)
- No use of latex, PVC and phthalat
- Free of heavy metals

#### Contact

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