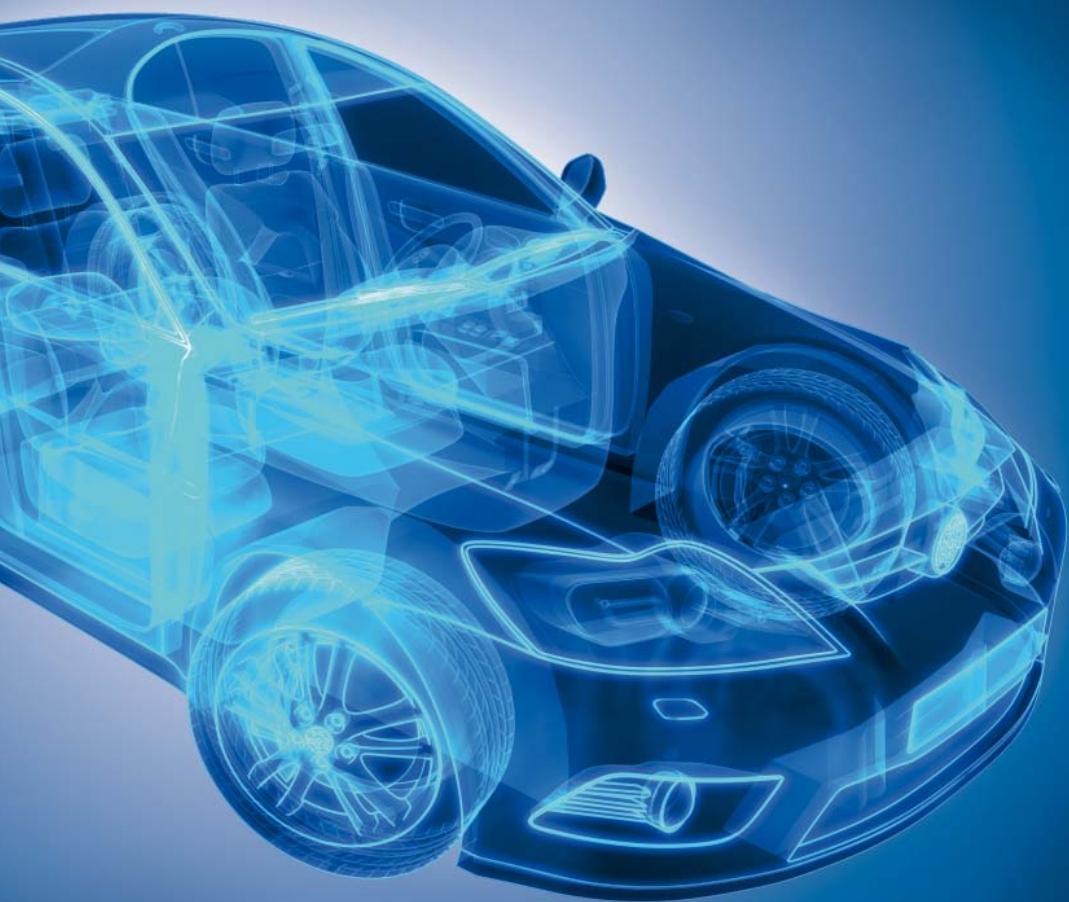




# TPE

Specializing in the automotive and industrial sectors

# THERMOLAST® V



*CUSTOM-ENGINEERED TPE AND MORE*

## Applications involving TPE

There is a growing demand for synthetics worldwide. Parts made from this class of materials are being increasingly used for component production, particularly in automotive engineering. Nowadays, up to 15 % of a new automobile may consist of high-grade plastics.

In recent years, more and more OEMs in specific sectors are relying on thermoplastic elastomers (TPE). It is not only weight and mechanical values that play a key role when selecting materials, but also simple workability and adhesion properties.

KRAIBURG TPE has developed a material that caters to these very requirements: THERMOLAST® V. The innovative product group enables adhesion to hard components such as PP and PA and withstands the high temperatures under the hood.



THERMOLAST® V compounds are ideal for use in the automotive sector.

## THERMOLAST® V for high demands

THERMOLAST® V belongs to the materials class of TPV- (SEBS+PP). Crosslinked polystyrene endblocks give THERMOLAST® V compounds greater thermal stability and chemical resistance to other thermoplastic elastomers.

In addition, the THERMOLAST® V product group offers excellent hysteresis behavior as well as outstanding compressive stress relaxation; paving the way for new applications for the automotive sector and industry. They have a long service life despite high temperatures and load levels, especially for parts positioned close to the engine.

## Bonding to PP and PA

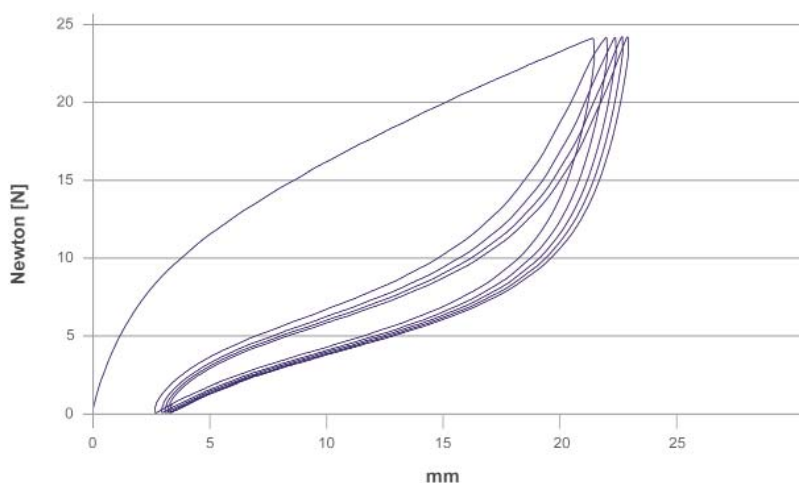
Numerous applications require specific bonding to various materials, allowing you as the molder, to save both time and money during the manufacturing process. The use of a co-injection molding process with our THERMOLAST® V compounds ensures great adhesion to hard components.

The LTP series will bond to polypropylene (PP) with a co-injection molding process. Unique on the market, the LTP/AD/PA series adheres to polyamide (PA) and displays exceptional long-term temperature performance, such as the LTP series.

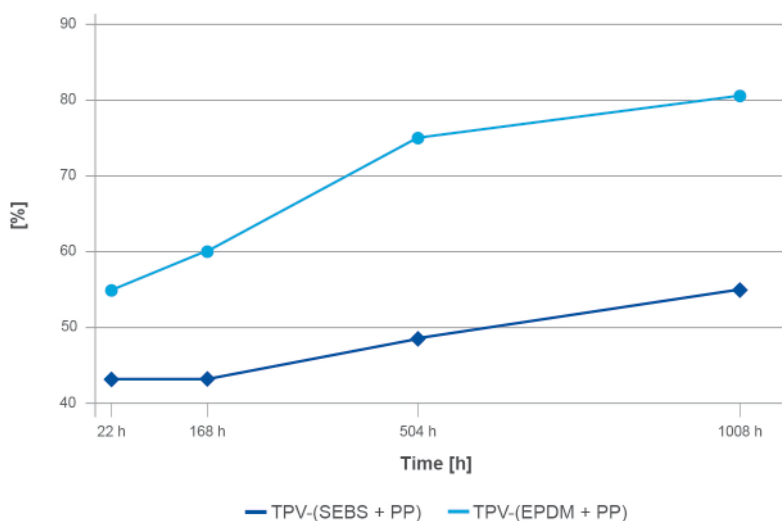
## Mechanical properties

### Hysteresis behavior

THERMOLAST® V compounds are highly elastic in their response to hysteresis testing and offer minor permanent deformation.



### Long-term compression set as per ISO 815 (120 °C)



The THERMOLAST® V (TPV-(SEBS+PP)) compound shows clear advantages in performance over TPV-(EPDM+PP) of a similar hardness.

## A wide range of possible applications

Given their excellent mechanical properties at high temperatures, compounds from the THERMOLAST® V portfolio are ideal for applications in the automotive sector and the mechanical engineering.

Thanks to their long-term thermal stability, they can be used in the vehicle engine compartment. THERMOLAST® V is also suitable for external applications. The compounds in this product group are resistant to polar media such as water, acids and bases. THERMOLAST® V is also characterized by its good resistance to UV and weathering. Bonding to PP and PA, which is achieved by a co-injection molding process, further extending the range of applications offered by THERMOLAST® V.

Thermoplastic elastomers from the THERMOLAST® V product portfolio can be used for applications such as:

- seals
- toothed belt covers
- cable bushings



## THERMOLAST® V at a glance

- 50 - 80 Shore A with bonding to PP
- 50 - 80 Shore A with bonding to PA
- Excellent thermal stability
- Wide range of coloring options
- Very good compression set
- Low-temperature elasticity to -40 °C
- Excellent mechanical properties
- Outstanding fluidity
- Smooth surface
- Processing in co-injection molding process
- Very good resistance to UV and weathering
- Ideal for static seals
- Recyclability

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## Contact

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