

## FACT SHEET

# Thermally conductive TPE



INDUSTRY



#### Our Know-how - Your Advantage

Thermally conductive TPEs are your solution for applications requiring thermal management in the component. The natural colored materials are characterized by good thermal conductivity and adhere to thermoplastics such as PP or PA.

- TPE materials with thermal conductivity and electrical insulation
- Different thermal conductivites are available
  - » Thermal conductivity ~ 1 W/(m\*K)» Thermal conductivity ~ 3 W/(m\*K)
- Adhesion modifications to polyolefins or polyamides for 2-component injection molding possible
- Thermoplastic processability
- Grades in natural colour are directly available, coloring after consultation on individual requirements possible
- Dry, uniform surfaces
- High quality haptics through high density
- "Cold" grip feeling
- Free of PVC and silicone
- Purchase quantities up to 100 kg available

### **Typical Applications**

- LEDs
- Batteries for power tools
- Batteries for e-mobility
- Charging systems for e-mobility
- Drive units



#### **Technical Data**

		HTC1500/ 122	HTC1500/ 109	HTC1500/ 117	HTC1500/ 132
Hardness	Shore A	60	55	60	81
Thermal conductivity X*	W/(m*K)	1.0	3.0	3.0	
Thermal conductivity Y*	W/(m*K)	1.0	3.0	3.0	
Thermal conductivity Z*	W/(m*K)	0.7	1.5	1.5	0.7
Density	g/cm³	2.0	1.4	1.4	2.01
Tensile strength	MPa	1.5	2.0	2.0	3.4
Elongation at break	%	500	100	100	110
Tear resistance	N/mm	12.0	16.0	14.0	14.2
Adhesion to		PP	PP	PA	PA6

\* X- and Y-values are measured in-plane, Z-value is measured through-plane.

### TALK TO OUR EXPERTS!

KRAIBURG TPE GMBH & CO. KG - EUROPE, MIDDLE EAST, AFRICA

info@kraiburg-tpe.com

KRAIBURG TPE TECHNOLOGY (M) SDN. BHD. - ASIA PACIFIC

info-asia@kraiburg-tpe.com

**KRAIBURG TPE CORPORATION - AMERICAS** 

info-america@kraiburg-tpe.com

#### Verena Last

#### Projekt leader

"Due to the increasing power density of appliances, improved thermal management is becoming increasingly important. The future market of thermally conductive TPEs will grow strongly - we are very well positioned with our material."