

THERMOLAST® K TC6GPN (Series: GP/HM)

Styrene Ethylene Butylene Styrene Block Copolymer
KRAIBURG TPE Corporation



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Technical Data

Product Description

TYPICAL APPLICATIONS:

- design-functional elements: packaging
- automotive indoor and under the hood: anti-slip-mats, air-run-channels, air-water-channels
- soft touch: tracer, push buttons, switches
- handles: screwdriver, toolbox, ski and hiking sticks

MATERIAL ADVANTAGES

- excellent mechanical properties
- excellent physical properties
- natural compounds easy to colour
- meets odour specification for automotive interior
- good weather resistance for black compounds
- listed according to UL94HB
- very good flow characteristics
- adhesion to PP

PROCESSING

- like polyolefine
- processing temperature 180 °C to 220 °C (max. 250 °C)
- preferably high injection and pressure

General

Material Status	• Commercial: Active
Literature ¹	• Processing - Extrusion (English) • Processing - Injection (English) • Technical Datasheet (English)
UL Yellow Card ²	• E353857-101117931 • E214822-586887
Search for UL Yellow Card	• KRAIBURG TPE Corporation • THERMOLAST® K
Availability	• Asia Pacific • Europe • North America
Features	• General Purpose • Good Colorability • Low to No Odor • Good Adhesion • Good Flow
Uses	• Automotive Applications • General Purpose • Soft Touch Applications • Automotive Interior Parts • Handles • Switches • Automotive Under the Hood • Packaging
Appearance	• Natural Color
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density	1.10 g/cm ³	ISO 1183
Elastomers	Nominal Value Unit	Test Method
Tensile Stress ⁴ (Yield)	6.00 MPa	ISO 37
Tensile Elongation ⁴ (Break)	680 %	ISO 37
Tear Strength ⁵	16 kN/m	ISO 34-1
Compression Set		ISO 815
23°C, 72.0 hr	18 %	
70°C, 22.0 hr	42 %	
100°C, 22.0 hr	70 %	
Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore A)	60	ISO 868
Flammability	Nominal Value Unit	Test Method
Flame Rating	HB	UL 94

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Injection	Nominal Value Unit
Drying Temperature	60.0 to 80.0 °C
Drying Time	2.0 to 4.0 hr
Rear Temperature	180 °C
Middle Temperature	200 °C
Front Temperature	220 °C
Mold Temperature	25.0 to 40.0 °C
Injection Pressure	5.00 to 40.0 MPa
Injection Rate	Fast
Back Pressure	2.00 to 5.00 MPa

Injection Notes

Hot Runner Temperature: 200 to 250°C
Hot runner should be empty after a maximum of 2 to 3 shots.
With materials <50 Shore A the use of a needle seal nozzle is advisable.

Extrusion	Nominal Value Unit
Drying Temperature	60.0 to 80.0 °C
Drying Time	2.0 to 4.0 hr
Cylinder Zone 1 Temp.	160 °C
Cylinder Zone 2 Temp.	180 °C
Cylinder Zone 3 Temp.	200 °C
Die Temperature	180 to 190 °C

Extrusion Notes

L/D Ratio: 25:1
Compression Ratio: 3.5:1
Mold Clamping Zone: 3 to 5 mm
Extruder Heat Temperature: 180°C

Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL IDES continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.
- ³ Typical properties: these are not to be construed as specifications.
- ⁴ Type S2, 200 mm/min
- ⁵ Method Bb, Angle (Nicked)

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Where to Buy

Supplier

KRAIBURG TPE Corporation

Duluth, GA USA

Telephone: 678-584-5020

Web: <http://www.kraiburgtpe.com/>

Distributor

Chase Plastic Services, Inc.

Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here:

<http://www.chaseplastics.com/contact/locations>

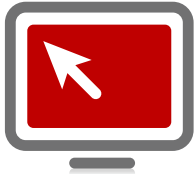
Telephone: 800-232-4273

Web: <http://www.chaseplastics.com/>

Availability: North America



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Prospector Plastics Database - www.ides.com/prospector

Prospector is a searchable online database that includes 85,000 data sheets from 875 manufacturers and 44,000 UL yellow cards. Each data sheet includes property, processing and supplier contact information. Prospector is relied on by nearly 400,000 design engineers and plastics processors. Using Prospector, they save time with plastic material selection by quickly and easily referencing technical information critical to the success of their products.

"Prospector is absolutely the best and most well-known search engine for plastic raw materials in the world. We use Prospector every day – it's a real time saver!"

– Birgit Elvardt Bader, Production Manager, Micotron

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Alternative Resins Search – find replacement plastics within minutes.

Automotive Plastics Search – easily locate automotive approved plastics.

Curve Data – view, overlay and export curve data.



Material Data Management – www.ides.com/datasheets

With our data management services, plastic suppliers and distributors can have custom search interfaces available on their website for their customers, website visitors, sales and customer service teams. These provide intuitive ways to find and view technical data sheets for their products.

"With UL IDES data services, our website now displays the most current information on the products we distribute and links to our backend RFQ and sales order system, adding both value and service for our customers."

– Kevin Chase, Owner & President, Chase Plastics



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