

## THERMOLAST® K TC6CEZ (Series: VS/AD/HM)

KRAIBURG TPE - *Thermoplastic Elastomer*

### General Information

#### Product Description

The VS/AD/HM series is your material solution for applications with velvety surfaces and wear high resistance requirements. It convinces by its adhesion properties to polar thermoplastics as well as by its resistance to nonpolar substances, especially sebum skin grease and skin oils. The compounds are available in black and natural colors. Natural color variants can be colored in many different ways.

#### Typical applications

- Automotive Interior
- Remote controls
- Cell phone covers
- Ear phones
- Handles (hand tools and power tools etc.)
- Cosmetic packaging
- Soft touch surface (thumb wheels, push buttons, switches)
- Wearables
- Function and design elements
- Car mats

#### Material advantages

- Adhesion to PA6 and PA12
- Adhesion to PC, ABS, PC/ABS, ASA, SAN
- Abrasion resistance
- Scratch resistance
- Optimized mechanical properties
- Resistance to skin oils, sunscreen or olive oil
- Halogen content (chlorine + bromine) < 900 ppm
- Soft, velvety feel

#### Regulations / Approvals

- VW 50123
- BMW GS 93042
- Mercedes-Benz DBL 5562
- Stellantis B62 0300
- Renault 03-10-104
- Stellantis MS-DC-242
- UL 94 HB
- ISO 10993-10 (Skin irritation)
- TESLA TM-1010

#### General

|                           |                                                     |                                                  |                           |
|---------------------------|-----------------------------------------------------|--------------------------------------------------|---------------------------|
| Material Status           | • Commercial: Active                                |                                                  |                           |
| Availability              | • Africa & Middle East<br>• Asia Pacific            | • Europe<br>• Latin America                      | • North America           |
| Additive                  | • Halogen: < 900 ppm                                |                                                  |                           |
| Features                  | • Abrasion Resistant<br>• Good Adhesion             | • Good Colorability<br>• Good Scratch Resistance | • Oil Resistant<br>• Soft |
| Uses                      | • Automotive Interior Parts<br>• Cosmetic Packaging | • Handles<br>• Protective Coverings              | • Soft Touch Applications |
| Agency Ratings            | • DIN 75201B                                        |                                                  |                           |
| Automotive Specifications | • MERCEDES BENZ DBL 5562                            | • STELLANTIS B62 0300                            | • VOLKSWAGEN 50123        |
| Appearance                | • Black                                             |                                                  |                           |
| Processing Method         | • Injection Molding                                 |                                                  |                           |

### Properties <sup>1</sup>



| Physical                                          | Nominal Value | Unit              | Test Method |
|---------------------------------------------------|---------------|-------------------|-------------|
| Density                                           | 1.15          | g/cm <sup>3</sup> | ISO 1183    |
| Elastomers                                        | Nominal Value | Unit              | Test Method |
| Tensile Stress <sup>2, 3</sup> (Break, 212°F)     | 2030          | psi               | ISO 37      |
| Tensile Elongation <sup>2, 3</sup> (Break, 212°F) | 600           | %                 | ISO 37      |
| Tear Strength <sup>4</sup>                        | 154           | lbf/in            | ISO 34-1    |
| Hardness                                          | Nominal Value | Unit              | Test Method |
| Shore Hardness (Shore A)                          | 60            |                   | ISO 48-4    |
| Flammability                                      | Nominal Value | Unit              | Test Method |
| Burning Rate                                      | 2.1           | in/min            | FMVSS       |
| Flame Rating                                      | HB            |                   | UL 94       |
| Additional Information                            | Nominal Value | Unit              | Test Method |
| Adhesion to PC - (C) <sup>5</sup>                 | 34            | lbf/in            | VDI 2019    |

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Type S2, 7.9 in/min

<sup>3</sup> Deviating from ISO 37 standard test piece S2 is tested with a traverse speed of 200 mm/min. Specimens were tempered for 20 hrs at 100°C (212°F)

<sup>4</sup> Method Bb, Angle (Nicked)

<sup>5</sup> Two-component injection molding

