

## THERMOLAST® K TF4CGN (Series: FC)

KRAIBURG TPE - *Thermoplastic Elastomer*

### General Information

#### Product Description

The FC series is your material solution for everyday life applications with regulatory requirements. The series is characterized by its PP adhesion. The natural-colored or translucent materials can be colored in many different ways.

#### Typical applications

- Household articles
- Function and design elements
- Grip applications
- Razors
- Toothbrushes
- Toys
- Packaging

#### Material advantages

- Adhesion to PP
- Halogen-free (according to IEC 61249-2-21)
- Colorable
- In-process recycling possible
- ISCC PLUS ready (mass balance approach)

#### Regulations / Approvals

- Regulation (EU) No 10/2011
- US FDA CFR 21 (raw material conformity)
- EN71-3
- ACS (DGS/VS4 n° 200/232)
- Compatible for HDPE Recycling certified by Cyclos HTP
- Compatible for PP Recycling certified by Cyclos HTP

#### General

|                   |                                         |                                         |        |
|-------------------|-----------------------------------------|-----------------------------------------|--------|
| Material Status   | • Commercial: Active                    |                                         |        |
| Availability      | • Africa & Middle East<br>• Europe      | • Latin America<br>• North America      |        |
| Features          | • Good Adhesion<br>• Good Colorability  | • Halogen Free<br>• Recyclable Material |        |
| Uses              | • Flexible Grips<br>• Household Goods   | • Packaging<br>• Toothbrush Handles     | • Toys |
| Agency Ratings    | • ACS DGS/VS 4 n° 2000-232<br>• EN 71-3 | • EU 10/2011<br>• FDA Food Contact      |        |
| Appearance        | • Natural Color                         |                                         |        |
| Processing Method | • Extrusion                             | • Injection Molding                     |        |

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

| Physical                                | Nominal Value | Unit              | Test Method |
|-----------------------------------------|---------------|-------------------|-------------|
| Density                                 | 1.10          | g/cm <sup>3</sup> | ISO 1183    |
| Elastomers                              | Nominal Value | Unit              | Test Method |
| Tensile Stress <sup>2</sup> (Break)     | 798           | psi               | ISO 37      |
| Tensile Elongation <sup>2</sup> (Break) | 850           | %                 | ISO 37      |
| Tear Strength <sup>3</sup>              | 68.5          | lbf/in            | ISO 34-1    |
| Compression Set <sup>4</sup>            |               |                   | ISO 815     |
| 73°F, 72 hr                             | 15            | %                 |             |
| 158°F, 24 hr                            | 27            | %                 |             |
| 212°F, 24 hr                            | 65            | %                 |             |



| Hardness                 | Nominal Value | Unit | Test Method |
|--------------------------|---------------|------|-------------|
| Shore Hardness (Shore A) | 40            |      | ISO 48-4    |

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

