

FC/AP Series
THERMOLAST® K

The FC/AP Series is your natural-colored and translucent material solution for applications with food contact. The series' features include an excellent adhesion to PP.

Typical applications

- Function and design elements
- Grip applications
- Household articles
- Packaging (for food and careproducts)
- Razors
- Seals
- Toothbrushes
- Toys

Material advantages

- Adhesion to PP
- Applications with food contact
- Easy coloring(compounds in natural colors)
- EN71/3
- Excellent mechanical properties
- Excellent processing behavior
- FDA compliant
- Halogen-free
- In natural or translucent available
- Pleasant surface feel (Soft touch)
- Recyclable
- Regulation (EU) 10/2011

Processing Method: Injection Molding

	Color / RAL DESIGN	Hardness Shore A DIN ISO 7619 ShoreA	Density DIN EN ISO 1183-1 g/cm ³	Tensile Strength ¹ DIN 53504/ISO 37 MPa	Elong. at Break S2 ¹ DIN 53504/ISO 37 %	Tear Resistance ISO 34-1 Methode B (b) N/mm
TF3BNA	natural	29	1.110	2.5	650	10.0
TF3BTL	translucent	28	0.880	6.2	850	7.4
TF4BNA	natural	39	1.110	4.0	650	10.0
TF4BTL	translucent	40	0.880	7.7	830	9.2
TF5BNA	natural	49	1.110	4.3	650	14.0
TF5BTL	translucent	49	0.880	8.0	800	14.2
TF6BNA	natural	59	1.110	5.0	650	17.0
TF6BTL	translucent	60	0.880	9.0	770	14.4
TF7BNA	natural	68	1.110	5.5	600	20.0

This datasheet is an extract of the KRAIBURG TPE program. Please contact KRAIBURG TPE to select the compound suitable for the requirements.

Disclaimer: The information provided in this documentation corresponds to our knowledge on the subject at the date of its publication and may be subject to revision as new knowledge and data becomes available. All values reported are typical values based on sample test results and are not a guarantee of performance. The responsibility to conduct testing to determine suitability of use for the particular process or end-use application remains with the customer. KRAIBURG TPE does not warrant or assume any liability with regards to the use of the information presented in this document.

FC/AP Series
THERMOLAST® K

	Color / RAL DESIGN	Hardness Shore A DIN ISO 7619 ShoreA	Density DIN EN ISO 1183-1 g/cm ³	Tensile Strength ¹ DIN 53504/ISO 37 MPa	Elong. at Break S2 ¹ DIN 53504/ISO 37 %	Tear Resistance ISO 34-1 Methode B (b) N/mm
TF7BTL	translucent	69	0.890	9.6	750	19.4
TF8BNA	natural	79	1.110	6.0	550	24.0
TF8BTL	translucent	78	0.890	9.4	650	26.5
TF9BNA	natural	87	1.110	8.0	500	26.0
TF9BTL	translucent	88	0.890	10.5	600	41.4

¹ Deviating from ISO 37 standard test piece S2 is tested with a traverse speed of 200 mm/min.

All values published in this data sheet are rounded average values.
Specification limits are based on three-fold standard deviation from the average value.

This datasheet is an extract of the KRAIBURG TPE program. Please contact KRAIBURG TPE to select the compound suitable for the requirements.

Disclaimer: The information provided in this documentation corresponds to our knowledge on the subject at the date of its publication and may be subject to revision as new knowledge and data becomes available. All values reported are typical values based on sample test results and are not a guarantee of performance. The responsibility to conduct testing to determine suitability of use for the particular process or end-use application remains with the customer. KRAIBURG TPE does not warrant or assume any liability with regards to the use of the information presented in this document.

FC/AP Series
THERMOLAST® K
Processing Guideline Injection Molding

Cylinder temperature	180 - 200 - 220 °C, max. 250 °C (360 - 390 - 430 °F, max. 480 °F)
Hotrunner	Hot runner temperatures: 200 -250 °C (390 - 480 °F). The runner should be empty after a maximum of 2 - 3 shots.
Injection pressure	200 - 1000 bar (2900 - 14504 psi) (depending on the size and weight of the part).
Injection rate	In general, the fill time should not be more than 1–2 seconds.
Hold pressure	We recommend to derive the optimum hold pressure from determining the solidification point, starting with 40 % - 60 % of the required injection pressure.
Back pressure	20 - 100 bar; if colour batches are used, higher back pressure is necessary.
Screw retraction	If an open nozzle is used processing with screw retraction is advisable.
Mold temperature	25 - 40 °C (77 - 104 °F)
Pre drying	Pre drying of the material is not necessary; if surface moisture forms as a result of changes in temperature, the material should be dried for 2 - 4 hours at 60 - 80 °C (140° F).
Needle valve	With materials < 50 Shore A the use of a needle valve is advisable.
Screw geometry	Standard 3-zone polyolefine screw.
Residence time	The residence time is to be set as short as possible with a maximum of 10 minutes.
Cleaning recommendation	For cleaning and purging of the machine it is appropriate to use polypropylene or polyethylene. Machine must be PVC-free.

This datasheet is an extract of the KRAIBURG TPE program. Please contact KRAIBURG TPE to select the compound suitable for the requirements.

Disclaimer: The information provided in this documentation corresponds to our knowledge on the subject at the date of its publication and may be subject to revision as new knowledge and data becomes available. All values reported are typical values based on sample test results and are not a guarantee of performance. The responsibility to conduct testing to determine suitability of use for the particular process or end-use application remains with the customer. KRAIBURG TPE does not warrant or assume any liability with regards to the use of the information presented in this document.