

FC/AD1/PS Series
THERMOLAST® K

The FC/AD1/PS Series is your material solution for applications with food contact providing excellent adhesion to polar thermoplastics such as ABS, PC, PC/ABS and PS.

Typical applications

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

Material advantages

- Easy coloring
- Easy processing
- Excellent adhesion
- FDA compliant
- Pleasant surface feel (Soft touch)

Processing Method: Injection Molding

	Color	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 DIN ISO 34-1 N/mm
TF3ADG	natural	28	1.100	2.0	700	8.5
TF4ADG	natural	39	1.100	2.5	750	10.5
TF5ADG	natural	49	1.100	3.5	750	11.0
TF6ADG	natural	59	1.100	4.0	750	13.5

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.

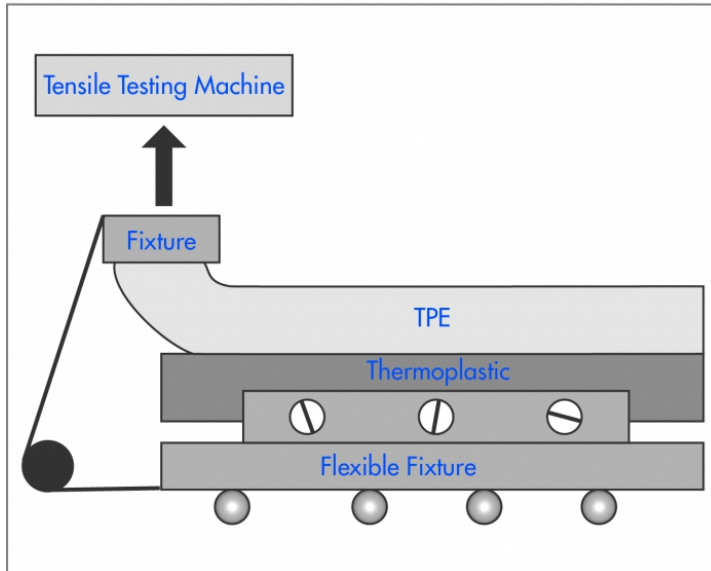
This datasheet is an extract of the KRAIBURG TPE program. Please contact KRAIBURG TPE to select the compound suitable for the requirements.

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.

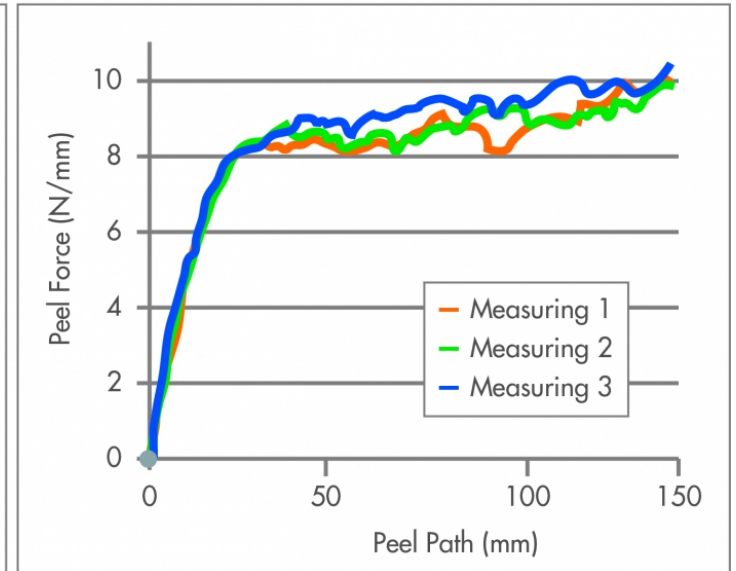
Description peel test

Peel test according to „Renault D41 1916“ standard

Test Setup



Example Diagramm as result of a peel test



The peel force is measured by a tensile testing machine in N/mm, in relation to the peel path. Test piece dimensions: Thermoplastic part: 130 x 22 x 2 mm, TPE part: 130 x 20 x 2 mm.

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Processing Guideline Injection Molding

Cylinder temperature	200 - 190 - 180 °C, max. 225 °C (390 - 374 - 356 °F, max. 437 °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 - 50 bar (285 - 710 psi); 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°C (140° F).
Needle shut-off	With materials < 50 Shore the use of a needle seal nozzle is advisable.
Screw geometry	Standard 3-zone polyolefine screw.
Cleaning recommendation	For cleaning and purging of the machine it is appropriate to use polypropylene or polyethylene. Machine must be PVC-free.

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