

AD/PAX/CR Series

For Tec E®

The AD/PAX/CR Series is your material solution for two-component-seals in electronic applications and soft-touch grips and handles of machine tools. The material provides an excellent resistance to skin oils, suncream, olive oil and acetone, accompanied by outstanding adhesion properties to semi-aromatic polyamids and polyarylamids such as PA 12, PA 6 und PA 6.6. The series is available in natural and black colors.

Typical applications

- Attenuators for electronic housings
- Connectors
- Handles (Powertool)
- Seals
- Seals for computer and laptopscreens
- Seals for housings

Material advantages

- Easy coloring (compounds in natural colors)
- Excellent adhesion to semi-aromatic Polyamides (PAX), Polyarylamids (PARA), Polyamides like PA 12, PA 6 and PA 6.6
- Excellent mechanical properties
- Resistance against skin oils, sunscreens, olive oil and acetone
- UL 94 HB listed

Processing Method: Injection Molding

	Color / RAL DESIGN	Hardness DIN ISO 7619-1 ShoreA	Density DIN EN ISO 1183-1 g/cm ³	Tensile Strength ¹ DIN 53504/ISO 37 MPa	Elongation at Break ¹ DIN 53504/ISO 37 %	Tear Resistance ISO 34-1 Methode B (b)(Graves) N/mm	CS 72 h/23 °C DIN ISO 815-1 Method A %	CS 24 h/70 °C DIN ISO 815-1 Method A %	CS 24 h/100 °C DIN ISO 815-1 Method A %	Adhesion to PARA VDI 2019 two-component injection molding N/mm
OC6OAN	natural	60	1.120	5.5	850	23.5	24	56	73	7.0 (B/D)
OC6OAZ	black	60	1.120	5.5	700	24.5	23	57	68	7.0 (B/D)
OC7OAN	natural	70	1.110	6.5	850	29.5	30	60	73	8.0 (B/D)
OC7OAZ	black	69	1.110	6.5	700	30.0	29	60	73	8.0 (B/D)
OC8OAN	natural	78	1.100	7.5	900	36.0	33	56	64	11.0 (D)
OC8OAZ	black	79	1.100	8.0	850	37.0	33	55	64	11.0 (D)

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

² The adhesion quality depends on mold design, product geometry and process parameters.

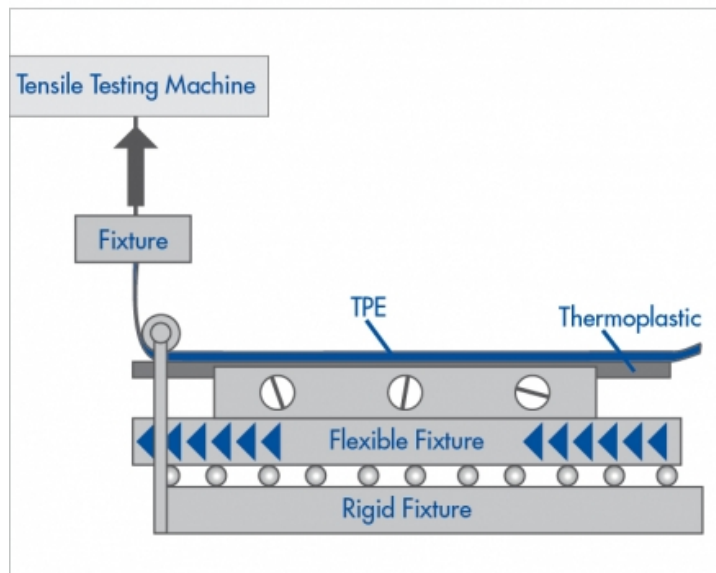
All values published in this data sheet are rounded average values.



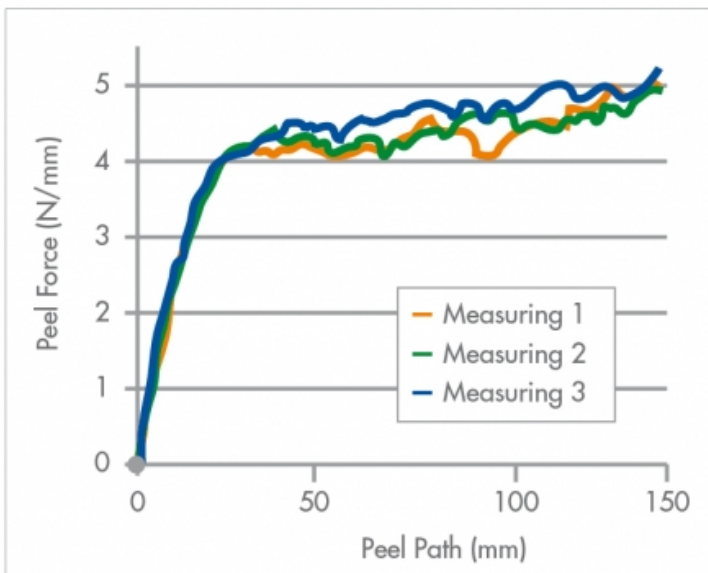
Description peel test

Peel test according to VDI guide line 2019

Test Setup



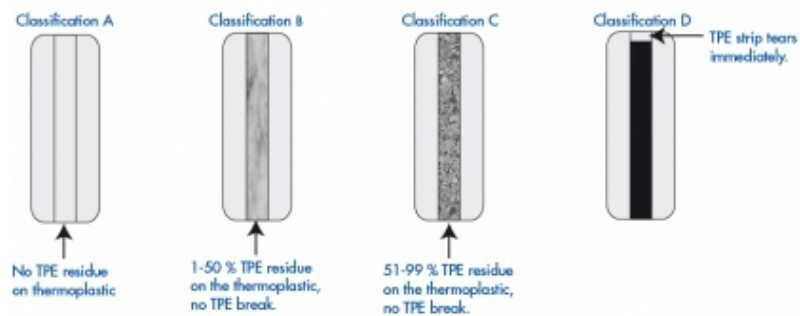
Example diagram for results of a peel test



Classification

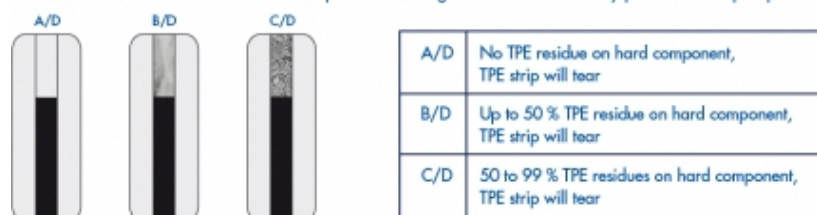
Peel test according to VDI Guideline 2019

For the VDI peel test we add two characters to the peel force value.
The first character describes the TPE residue on the hard component.



A	No TPE residue on hard component
B	Up to 50 % TPE residue on hard component
C	50 to 99 % TPE residue on hard component
D	TPE strip tears immediately

The second character describes if the TPE strip will tear during the measurement at any position on the peel path.



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Processing Guideline Injection Molding

Cylinder temperature	180 - 210 - 240 °C, max. 250 °C (360 - 410 - 460 °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 color batches are used, higher back pressure is necessary.
Screw retraction	If an open nozzle is used processing with screw retraction is advisable.
Mold temperature	The mold temperature depends on the hard component. A temperature exceeding 90 °C (194 °F) should be avoided. The common temperature is 60 - 80 °C (140 - 176° F).
Predrying	To achieve optimum mechanical values, drying the material for 2 - 4 hours at 60 - 80 °C (140 - 175 °F) is recommended.
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.

