

Triax KU 2-3050

Improved stability to light exposure for automotive interior applications, easy flowing, good chemical and stress crack resistance, very good impact strength, matt surface

ISO Shortname: [ABS+PA]

Property	Test Condition	Unit	Standard	Value	
				d.a.m.	cond.
Rheological properties					
C Melt volume-flow rate	260 °C; 5 kg	cm ³ /(10 min)	ISO 1133	6.0	
Molding shrinkage, parallel	150x105x3; 260 °C / MT 80 °C; 300 bar	%	acc. ISO 2577	0.9	0.8
Molding shrinkage, normal	150x105x3; 260 °C / MT 80 °C; 300 bar	%	acc. ISO 2577	1.0	0.85
Post- shrinkage, parallel	150x105x3; 80 °C; 1 h	%	acc. ISO 2577	0.06	
Post- shrinkage, normal	150x105x3; 80 °C; 1 h	%	acc. ISO 2577	0.05	
C Molding shrinkage, parallel	60x60x2; 260 °C / MT 80 °C; 500 bar	%	ISO 294-4	0,7	
C Molding shrinkage, normal	60x60x2; 260 °C / MT 80 °C; 500 bar	%	ISO 294-4	0,8	
Post- shrinkage, parallel	60x60x2; 80 °C; 1 h	%	ISO 294-4	0,1	
Post- shrinkage, normal	60x60x2; 80 °C; 1 h	%	ISO 294-4	0,1	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	1900	1050
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	40	30
C Yield strain	50 mm/min	%	ISO 527-1,-2	3.2	13
C Nominal strain at break	50 mm/min	%	ISO 527-1,-2	>= 50	>= 100
Tensile Stress at break	50 mm/min	MPa	ISO 527-1,-2	38	29
Tensile Strain at break	50 mm/min	%	ISO 527-1,-2	>= 50	>= 100
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	N	N
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	N	N
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	63	63
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	12	12
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	N	N
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	N	N
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	60	60
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	11	11
Flexural modulus	2 mm/min	MPa	ISO 178	1800	1000
Flexural strength	2 mm/min	MPa	ISO 178	60	39
Flexural strain at flexural strength	2 mm/min	%	ISO 178	5.7	6.6
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178	54	32
Thermal properties					
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	68	93
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	91	99
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	102	98
Vicat softening temperature	10 N; 120 °C/h	°C	ISO 306	185	170

INEOS ABS

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				d.a.m.	cond.
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1.05	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1.15	
C Burning behavior UL 94 (1.6 mm)	1.5 mm	Class	UL 94	HB	
Electrical properties (23 °C/50 % r. h.)					
C Relative permittivity	100 Hz	-	IEC 60250	4.3	6.7
C Relative permittivity	1 MHz	-	IEC 60250	3.6	3.7
C Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	290	1000
C Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	300	550
C Volume resistivity		Ohm·m	IEC 60093	1E12	1E10
C Surface resistivity		Ohm	IEC 60093	1E14	1E14
C Electric strength	1 mm	kV/mm	IEC 60243-1	34	34
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	600	
Other properties (23 °C)					
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	~6	
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	~1.7	
C Density		kg/m ³	ISO 1183	1060	
Processing conditions for test specimens					
C Injection molding-Melt temperature		°C	ISO 294	260	
C Injection molding-Mold temperature		°C	ISO 294	80	
C Injection molding-Injection velocity		mm/s	ISO 294	40	

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.