TECHNYL® ALLOY KC 246 NATURAL

Polyamide 6 + ABS

Solvay Engineering Plastics

Message:

TECHNYL® ALLOY KC 246 Natural is an unfilled grade based on blend of polyamide 6 and acrylonitrile butadiene styrene (PA6 + ABS), impact modified, for injection moulding. This grade offers high mechanical properties, good dimensional stability and good processability. This grade offers an excellent impact with an ideal combination between stiffness and toughness.
It is a synergistic blend material between Polyamide 6 and ABS with an ideal property combination, meaning that it has dual characteristics between semi-crystalline and amorphous polymers.

General Information				
Features	Impact resistance, high			
Uses	Furniture Sporting goods			
Agency Ratings	EC 1907/2006 (REACH)			
RoHS Compliance	RoHS compliance			
Appearance	Black Grey Natural color			
Forms	Particle			
Processing Method	Injection molding			
Resin ID (ISO 1043)	PA6+ABS			
Physical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Density	1.08	--	g/cm³	ISO 1183/A
Water Absorption (23°C, 24 hr)	0.90	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (23°C)	2250	--	MPa	ISO 527-2/1A
Tensile Stress (Break, 23°C)	53.0	--	MPa	ISO 527-2/1A
Tensile Strain (Break, 23°C)	94	--	%	ISO 527-2
Flexural Modulus (23°C)	2150	--	MPa	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	63	--	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	No Break	--		ISO 179/1eU
Notched Izod Impact (23°C)	48	--	kJ/m²	ISO 180
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				

0.45 MPa, not annealed	105	--	°C	ISO 75-2/Bf
1.8 MPa, not annealed	70.0	--	°C	ISO 75-2/Af
Melting Temperature	225	--	°C	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Comparative Tracking Index (Solution A)	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.8 mm)	HB	--		UL 94
Glow Wire Flammability Index				IEC 60695-2-12
0.8 mm	750	--	°C	IEC 60695-2-12
1.6 mm	650	--	°C	IEC 60695-2-12
3.2 mm	650	--	°C	IEC 60695-2-12
Injection	Dry	Unit		
Drying Temperature	80		°C	
Suggested Max Moisture	0.20		%	
Rear Temperature	235 - 240		°C	
Middle Temperature	240 - 250		°C	
Front Temperature	250 - 260		°C	
Mold Temperature	60 - 90		°C	

Injection instructions

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point mini -20°C. Recommended time 2-4hInjection Advice:
For unfilled polyamide, Solvay recommends the use of high alloy steel with a weak chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm). For Mould Temperature, in the case of parts where the surface roughness is required we can recommend a temperature of 90°C to 120°C with an optimum at 105°C.
The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design

Recommended distributors for this material

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