

PA6.10 & PA6.12 Polymers



PRODUCT	POLYAMIDE 6.10		POLYAMIDE 6.12	
	7030	7050	8030	8070
Type	134 SC 00 D	134 SC 00 PC223	134 DH 00 D	134 DH 00 PC220
Designation				

General properties					Unit	Method
Density	1.07	1.07	1.06	1.06	g/cm ³	ISO 1183-1
Viscosity number, formic acid 90 %	138	223	138	220	ml/g	ISO 307
Water absorption, saturation in water 23°C	2.00	2.00	2.00	2.00	%	ISO 62
Moisture absorption, sat. in 23°C/50 % r.h. atm.	0.90	0.90	0.90	0.90	%	ISO 62

Thermal properties					Unit	Method
Melting temperature, DSC	223	223	215	215	°C	ISO 11357-1/-3
Solidification point	192	192	186	186	°C	ISO 11357-1/-3

Mechanical properties	DAM		Cond.		DAM		Cond.		DAM		Cond.		DAM - Dry As Moulded
	DAM	Cond.	DAM	Cond.	DAM	Cond.	DAM	Cond.	DAM	Cond.			
Tensile modulus E_t	2,123	1,635	2,368	1,654	2,468	1,660	1,978	1,588	MPa			ISO 527-2/1A/1	
Yield stress σ_y	61.8	48.3	64.5	50.1	60.6	49.9	59.9	50.3	MPa			ISO 527-2/1A/50	
Yield strain ϵ_y	4.6	21.2	4.1	20.4	4.2	17.6	4.1	18.8	%			ISO 527-2/1A/50	
Nominal strain at break ϵ_{tb}	124	88	243	170	78	128	234	275	%			ISO 527-2/1A/50	
Flexural modulus E_f	2,022	1,458	2,208	1,549	2,088	1,615	2,138	1,623	MPa			ISO 178	
Flexural strength σ_{fM}	83.2	57.6	86.8	59.6	83.4	61.7	81.4	60.6	MPa			ISO 178	
Flexural strength σ_{fC}	65.3	43.4	70.3	45.3	67.7	48.3	67	47.7	MPa			ISO 178	
Charpy impact strength a_{CU}	23 °C	No break	No break	No break	No break	No break	No break	No break	No break	No break	No break	kJ/m ²	ISO 179-1/1eU
	-30 °C	No break	No break	No break	No break	No break	No break	No break	No break	No break	No break	kJ/m ²	
Charpy notched impact strength a_{CA}	23 °C	5.2	8.2	5.3	10.0	4.9	7.0	5.3	8.3	kJ/m ²	ISO 179-1/1eA		
	-30 °C	3.9	4.9	6.0	6.9	4.6	5.3	5.4	6.2	kJ/m ²			

TYPE	Viscosity number	Moisture Content	Chip Weight	Chip Dimension			Melting Point	Solidificati on Point
	(ml/g)	(%)	(mg)	(mm)			(°C)	(°C)
PA 6.10	* Viscosity ISO-Std.307, VI (Formic Acid 90%)							
7030	138	< 0,07	13	2.7	2.8	3.4	223	192
7035	154							
7040	189							
7050	223							
7060	248							
Under Development								
7005	113	< 0,07	13	2.7	2.8	3.4	223	192
7011	125							
PA 6.12	* Viscosity ISO-Std.307, VI (Sulfuric Acid 96%)							
8030	138	< 0,07	13	2.7	2.8	3.4	215	186
8040	160							
8050	180							
8060	200							
8070	220							
Under Development								
8005	113	< 0,07	13	2.7	2.8	3.4	215	186

Packaging				
Packaging type	Bags/Sacks		Pallet	
	Dimensions (mm x mm x mm)	Net Weight (kg)	LxW (mm x mm)	Number/ Pallet
Sacks	810x390x120	25	1200x800	28
Big Bags	950x950x1700	1000	1100x1100	1
Octabins	1105x1105x945	700	1140x1140	1

Note: Non-standard packaging is subject to special agreement