

**PA6.10 & PA6.12 Polymers**



PRODUCT	POLYAMIDE 6.10		POLYAMIDE 6.12	
	7030	7050	8030	8070
Type	134 SH 00 D	134 SH 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 <sup>3</sup>	ISO 1183-1
Viscosity number, formic acid 90 %	138	223	138	220	ml/g	ISO 307
Water absorption, saturation in water 23°C	< 2	< 2	< 2	< 2	%	ISO 62
Moisture absorption, sat. in 23°C/50 % r.h. atm.	< 1	< 1	< 1	< 1	%	ISO 62

**Thermal properties**

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 - Dry As Moulded / Cond. - Conditioned		
	DAM	Cond.	DAM	Cond.	DAM	Cond.	DAM	Cond.			
Tensile modulus $E_T$	2 100	1 600	2 400	1 650	2 470	1 660	2 000	1 600	MPa	ISO 527-2/1A/1	
Yield stress $\sigma_y$	62	48	65	50	60	50	60	50	MPa	ISO 527-2/1A/50	
Yield strain $\epsilon_y$	4,5	21	4	20	4	18	4	19	%	ISO 527-2/1A/50	
Nominal strain at break $\epsilon_{tb}$	> 50	> 50	> 50	> 50	> 50	> 50	> 50	> 50	%	ISO 527-2/1A/50	
Flexural modulus $E_f$	2 000	1 460	2 200	1 550	2 100	1 600	2 100	1 600	MPa	ISO 178	
Flexural strength $\sigma_{fM}$	83	58	87	60	83	62	81	61	MPa	ISO 178	
Flexural strength $\sigma_{fC}$	65	43	70	45	68	48	67	48	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	kJ/m <sup>2</sup>	ISO 179-1/1eU
	-30 °C	No break	No break	No break	No break	No break	No break	No break	No break	kJ/m <sup>2</sup>	
Charpy notched impact strength $a_{CA}$	23 °C	5	8	5	10	5	8	5	8	kJ/m <sup>2</sup>	ISO 179-1/1eA
	-30 °C	4	5	6	7	5	5	5	6	kJ/m <sup>2</sup>	

TYPE	Viscosity number	Moisture Content		Chip Weight	Chip Dimension			Melting Point	Solidificati on Point
	(ml/g)	(%)		(mg)	(mm)			(°C)	(°C)
<b>PA 6.10</b>	<b>* Viscosity ISO-Std.307, VI (Formic Acid 90 %)</b>								
7005	113	< 0,30	< 0,07	13	2,7	2,8	3,4	223	192
7011	125								
7030	138								
7035	154								
7040	189								
7050	223								
7060	248								
<b>PA 6.12</b>	<b>* Viscosity ISO-Std.307, VI (Sulfuric Acid 96 %)</b>								
8030	138	< 0,07	13	2,7	2,8	3,4	215	186	
8040	160								
8050	180								
8060	200								
8070	220								
<b>Under Development</b>									
8005	113	< 0,07	13	2,7	2,8	3,4	215	186	

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

Note: Non-standard packaging is subject to special agreement