

Ultramid® (PA) and Ultradur® (PBT)

for mandrel extrusion





An innovative solution for the vulcanization process of hydraulic hoses

- Easy processing and calibration of mandrels
- Consistent output and diameter
- High line speeds possible due to nucleation of compounds
- Excellent surface quality of mandrels
- High number of material turns

- Excellent chemical resistance
- High curing temperatures up to 175°C possible
- No snake-skin experienced even after several cycles
- Easy release of mandrels due to innovative lubricant
- High extraction lengths possible



Mandrel materials with low Young's modulus



Ultradur® (PBT)

Product properties

Ultramid® (PA)

→ Low water uptake – high dimensional stability

→ Low Young's modulus – high flexibility

- Good processability in extrusion
- Foaming is possible, helps to avoid voids and to increase mandrel flexibility
- In-house coloring of mandrels with master batches
- Exceptional sliding friction properties

			Ultradur® grades		Ultramid® grades	
	Norm	Unit	B6551 LNI R01	B6554 LNI	EXP B4Z8 UN	B4Z8 R01 UN
Melt temperature DSC	ISO 11357-1/-3	°C	223	213	220	220
MVR (250 °C, 2.16 kg)	ISO 1133	cm ³ /10min	3	3.5		
Young's modulus (dry/cond.)	ISO 527-1/-2	MPa	2500	900	650/270	500/250
Elongation at break, 50 mm/min		%	>50	>50	230/330	250/320
Shore hardness D (dry/cond.)	ISO 868	-	78	63		58/51
HDT A	ISO 75-1/-2	°C	53	48		43
HDT B	ISO 75-1/-2	°C	150	85		60
Density	ISO 1183	g/cm ³	1.31	1.28		1034
Abrasion resistance (dry/cond.)	ISO 4649	mm ³		74		-/31

For technical queries relating to Ultradur® and Ultramid® please contact:



Please visit our websites ultradur.com ultramid.com plastics.basf.com ultradurextrusion.basf.com

