



Help me choose

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Help our customers decide which material is best for their application

	PA12	PA11	PA12 GB	PP	BASF TPU	LZ TPU	Vestosint	CB PA 12
Stiffness	●	●	●	●	●	●	●	●
Impact resistance	●	●	●	●	●	●	●	●
Elongation	●	●	●	●	●	●	●	●
Dimensional capability	●	●	●	●	●	●	●	●
Level of detail	●	●	●	●	●	●	●	●
Flat part	●	●	●	●	●	●	●	●
Temperature resistance	●	●	●	●	●	●	●	●
Chemical resistance	●	●	●	●	●	●	●	●
Low moisture absorption	●	●	●	●	●	●	●	●
Lightweight	●	●	●	●	●	●	●	●

- Best
- Good
- Fair
- Not recommended



HOW TO CHOOSE RIGID POLYMERS

	HP 3D HR PA12	HP 3D HR PA11	HP 3D HR PA12 GB	HP 3D HR PP
MATERIAL PROPERTIES	<ul style="list-style-type: none"> • Robust & strong • Good balance performance-Price • Good balance between tensile strength and elongation 	<ul style="list-style-type: none"> • Ductile, flexible and with high strength • Higher Elongation & Impact • Raw material from vegetable castor oil • Better small, features 	<ul style="list-style-type: none"> • High stiffness • Good dimensional stability – less warpage • Higher HDT 	<ul style="list-style-type: none"> • Best chemical resistance • Low moisture absorption • Weldable • Flexibility is important but not essential
WORKFLOW	Between 30-40h of cooling, depending on machine and material			60h cooling
REUSABILITY (up to)	80%	70%	70%	90%
POST PROCESSING	Coating, dyeing & chemical etching		-	BASF UV precoating
COMPATIBILITY	4200 & 5200	4200 & 5200	4200 & 5200	5200



HOW TO CHOOSE ELASTOMERIC MATERIALS

	BASF Ultrasint TPU01	ESTANE 3D TPU M95A
MATERIAL PROPERTIES	<ul style="list-style-type: none"> • Best balance on rebound resilience and compression set • Better color uniformity • Better repeatability 	<ul style="list-style-type: none"> • Harder TPU – 90 shore A & higher tear strength • Print half buckets to improve degradation and repeatability • Better performance at high temperatures
WORKFLOW	Warm unpack	Easy to unpack and clean
REUSABILITY (up to)	80%	80%
POST PROCESSING	Chemical etching, Spray coating	Chemical etching
COMPATIBILITY	5200	4200



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