

Material Comparison Table



Vacuum Casting

Vacuum casting is a polymer casting process that uses silicone moulds to create highly accurate parts.

****If the material you require isn't listed, please contact our sales team.**

Material	AME 0095	AME 8891	AME 8051	AME 8263	AME PX234HT	AME 8060-1	AME 3351	
Description	ABS	Flexible Rubber	ABS	ABS	Polyurethane Resin	Similar to PP/PE	UV-Stable	
	Highly versatile all-round material.	Adjustable hardness.	Great for panels and enclosures.	Similar to injection moulding components.	Suitable for prototypes & technical parts.	Suitable for prototypes & technical parts.	Waterclear with excellent mechanical properties.	
Available Colours	Black	White/Transparent + Painted or dyed in any colour	Light Sand Tone	White Painting/dying not advised unless flame-retardant paint used.	Brown	Transparent/Yellowish + Painted or dyed in any colour	Transparent	
Properties	Soft		x					
	Rigid	x		x	x	x	x	
	High Temp.			x		x		
	Low Temp.	x					x	
	Flame Retardant				x			
	Shore Hardness	74D, 77D, 82D	20 - 90A	77D, 78D, 84D	80D, 83D	80D	80D	75 - 80D
	Tensile Strength	54 MPa	2 - 17 MPa	55.9 MPa	68 MPa	61 MPa	47 MPa	60 - 64D
	Tensile Modulus	2,521 MPa	-	2,150 MPa	-	1,800 MPa	1,225 MPa	1,500 - 1,800 MPa
	Flexural Strength	88.6 MPa	-	85 MPa	93 MPa	80 MPa	60 MPa	95 - 100 MPa
	Flexural Modulus	2,195 MPa	-	1,965 MPa	2,200 MPa	1,850 MPa	1,310 Mpa	2,150 - 2,450 MPa
	Heat Deflection Temp.	72° C	-	92° C	80° C	195° C	105 - 175° C	51 - 90° C
	Elongation Break	12%	270 - 330%	8%	15%	13%	43%	4.5 - 5.5%
	Yield Strength	64.2 MPa	-	62 MPa	-	-	-	-
	Thermal conductivity (W / mk)	0.208	-	0.225	7	-	-	-
Available Finishes	Textured, matt, satin or gloss surface finish, as well as rubber overmoulding finishes.							
Quantity	Up to 25 parts per tool.							



AME 0095



An all-round, ABS-like material. It can be spray painted in a wide variety of colours. Ideal for snap-fits and low temperature applications.

Measurement	Value
Shore Hardness	74, 77 & 82D
Tensile Strength	54 MPa
Tensile Modulus	2,521 MPa
Flexural Strength	88.6 MPa
Flexural Modulus	2,195 MPa
Heat Deflection Temp	72° C
Elongation Break	12%

Special finishes available for this material.

Actual values may vary depending on build conditions.
Our technical team can advise via info@ame-3d.co.uk.





AME 8891



A soft and flexible rubber-like material with a high elongation break and a variety of shore hardness choices.

Measurement	Value
Shore Hardness	20 - 90A
Tensile Strength	2 - 17 MPa
Elongation Break	270 - 330%

Special finishes are available for this material.

Actual values may vary depending on build conditions.
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VC
Vacuum Casting
Material Datasheet

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AME-3D
Realising in Three Dimensions



AME 8051

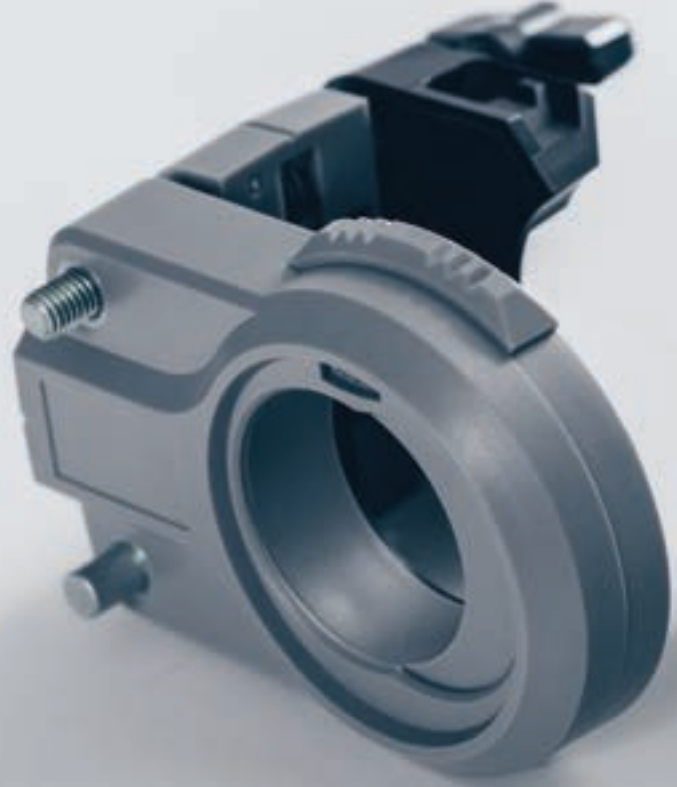


An ABS-type resin suitable for panels and enclosures. High temperature resistance with flexing properties.

Measurement	Value
Shore Hardness	77 - 84D
Tensile Strength	55.9 MPa
Tensile Modulus	2,150 MPa
Flexural Strength	85.9 MPa
Flexural Modulus	1,965 MPa
Heat Deflection Temp	92° C
Elongation Break	8%

Actual values may vary depending on build conditions.
Our technical team can advise via info@ame-3d.co.uk.





AME PX234HT



A polyurethane resin that is suitable for prototypes & technical parts.

Measurement	Value
Shore Hardness	80D
Tensile Strength	61 MPa
Tensile Modulus	1,800 MPa
Flexural Strength	80 MPa
Flexural Modulus	1,850 MPa
Heat Deflection Temp	196° C
Elongation Break	13%

Actual values may vary depending on build conditions.
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AME 8060-1

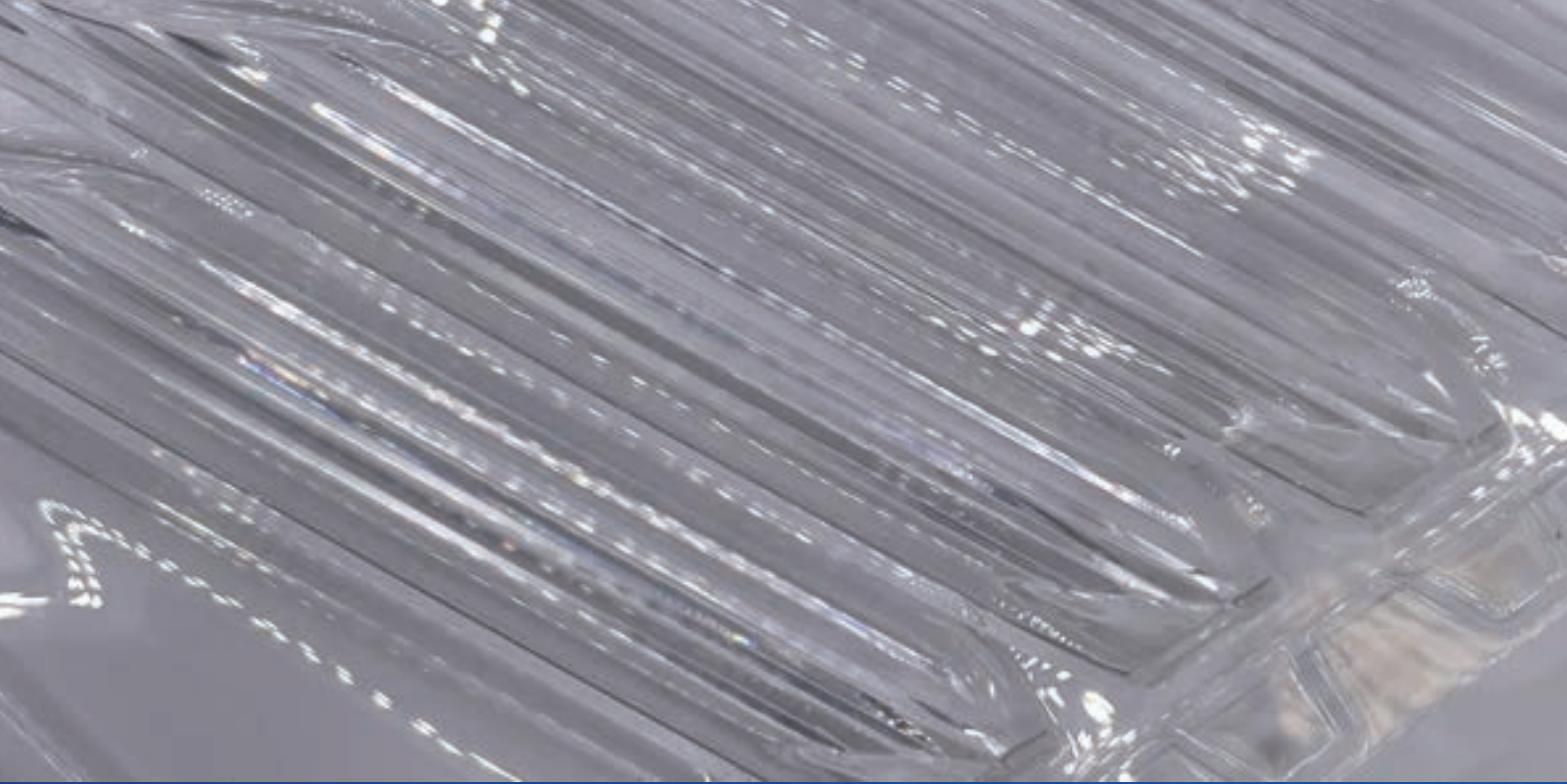


Similar to PP/PE. Suitable for prototypes and technical parts.

Measurement	Value
Shore Hardness	80D
Tensile Strength	47 MPa
Tensile Modulus	1,225 MPa
Flexural Strength	60 MPa
Flexural Modulus	1,310 MPa
Heat Deflection Temp	105 - 175° C
Elongation Break	43%

Actual values may vary depending on build conditions.
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AME 3351



UV-stable, water clear vacuum casting material. Has excellent mechanical properties and can simulate thermoplastics.

Measurement	Value
Shore Hardness	75 - 80D
Tensile Strength	60 - 64 MPa
Tensile Modulus	1,500 - 1,800 MPa
Flexural Strength	95 - 100 MPa
Flexural Modulus	2,150 - 2,450 MPa
Heat Deflection Temp	51 - 90° C
Elongation Break	5.4 - 5.5%

Actual values may vary depending on build conditions. Our technical team can advise via info@ame-3d.co.uk.

