

# Data sheet: vacuum casting resin 8060-3

Description		Simulates PP/PE																	
<b>Features</b>		Resistant to high temperatures																	
<b>Suitable for</b>		Automotive, under bonnet/hood																	
Cured properties		Test / ISO standard where applicable																	
Colour		Slightly yellow																	
Transparency		Translucent																	
Shore hardness	At 23 °C At 60 °C At 80 °C	80 D Not measured Not measured								868									
Flexural strength		64 N/mm <sup>2</sup>								178									
Flexural modulus		1320 N/mm <sup>2</sup>								178									
Tensile strength		Not measured								R 527									
Tensile modulus		Not measured								R 527									
Izod impact		13 kJ/m <sup>2</sup>								180									
Yield strength		Not measured								R 527									
Elongation yield		Not measured																	
Elongation at break		Not measured								R 527									
Tear strength		Not measured								34									
Thermal conductivity		Not measured								BS 874									
Heat deflection temperature		115 °C to 180 °C* (test piece 110 mm × 12.7 mm × 6.4 mm)																	
Glass transition temperature		125 °C to 195 °C																	
Processing information		Notes																	
Viscosity	Part A Part B	220 cPs 50 cPs								At 25 °C									
Specific gravity	Part A Part B	1.03 1.21								At 25 °C									
Mix ratio A:B		100:500								By weight									
Mixing time		30 s to 50 s																	
Resin temperature		40 °C								Heating chamber									
Mould temperature		70 °C								Heating chamber									
Curing temperature		65 °C to 70 °C								Heating chamber									
Curing time in mould		60 min																	
Pot life		330 s								100 g at 25 °C									
Primary degassing		30 min																	
Post curing process	*60 min at gives heat deflection temp. of	100 °C	110 °C	120 °C	130 °C	140 °C	150 °C	160 °C	170 °C	180 °C	120 °C	125 °C	135 °C	140 °C	155 °C	160 °C	165 °C	170 °C	175 °C
Typical shrinkage		0.5 %																	

The information in this data sheet is provided for general guidance only and must not be relied upon as a definitive statement of the product's properties or suitability. Renishaw will not be liable for the consequences of any decision by you to use the product and you must conduct your own testing to determine whether or not the product is suitable for your needs.

# Handling procedure

## Casting procedure

- Shake unopened A and B component cans vigorously for 10 s to 15 s
- Pre-heat mould in oven at 70 °C
- Pre-heat unopened A and B component cans in oven at 70 °C for 2 hours, then place in oven at 40 °C to stabilise prior to use
- Weigh A and B components into separate cups, allowing for cup loss (the amount of resin left in cup A after tipping)
- Add colour pigment to cup A
- Place filled cups in the machine and attach mixing paddle to cup B
- Start vacuum pump
- Switch on mixer motor
- Wait 10 minutes to 15 minutes after reaching maximum vacuum level before mixing
- Pour contents of cup A into cup B and mix as fast as possible without splashing
- Pour mixed resin into silicone mould and leak vacuum chamber before the end of the pot life
- Place filled mould in oven to cure resin
- For full instructions on casting procedures refer to **Vacuum Casting Technique: a guide for new users**, available at [www.renishaw.com](http://www.renishaw.com)

## Special notes

- Exact mould temperature is important
- Exact resin temperature is important
- Use no more than 2 % of total weight colour pigment

## Product information

- **Exotherm**  
This product generates a high exotherm heat.
- **Mould life**  
Mould life can be increased by using the correct Renishaw release agent and demoulding the casting immediately after curing.
- **Storage**  
Store unopened cans at > 20 °C.  
Protect against frost.  
Store opened cans in oven at 40 °C with caps on.  
Both components are sensitive to humidity.
- **In case of crystallisation of B-component**  
Place B-component cans in oven at 70 °C for 2 hours to 4 hours and stir resin afterwards.



Please follow the correct procedure for use in your vacuum casting system, as set out in its operating instructions.



Always follow the instructions in the Product Safety Data Sheets and always work in accordance with the safety instructions of the materials manufacturer. Safety Data Sheets can be found at [www.renishaw.com](http://www.renishaw.com).



Wear suitable respiratory protection, safety gloves and safety goggles during the entire filling procedure in accordance with the Product Safety Data Sheets.

