

# Data sheet: vacuum casting resin 6130

Description		Low viscosity for thin wall sections	
Features		Rubber-like	
Suitable for		Ideal for hoses, seals, and gaskets	
Cured properties		Test / ISO standard where applicable	
Colour	White		
Transparency	Translucent		
Shore hardness	At 23 °C 90 A At 60 °C Not measured At 80 °C Not measured		868
Flexural strength	Not measured		178
Flexural modulus	Not measured		178
Tensile strength	16.5 N/mm <sup>2</sup>		R 527
Tensile modulus	64.1 N/mm <sup>2</sup>		R 527
Izod impact	Not measured		180
Yield strength	Not measured		R 527
Elongation yield	Not measured		
Elongation at break	200 %		R 527
Tear strength	700 N/mm <sup>2</sup>		34
Thermal conductivity	0.234 W/mK		BS 874
Heat deflection temperature	Not measured	(test piece 110 mm × 12.7 mm × 6.4 mm)	
Glass transition temperature	Not measured		
Processing information		Notes	
Viscosity	Part A 600 cPs Part B 40 cPs		At 25 °C
Specific gravity	Part A 1.11 Part B 1.17		At 25 °C
Mix ratio A:B	100:100		By weight
Mixing time	30 s to 60 s		
Resin temperature	40 °C		Heating chamber
Mould temperature	70 °C		Heating chamber
Curing temperature	70 °C		Heating chamber
Curing time in mould	60 min to 120 min		
Pot life	360 s		100 g at 25 °C
Post curing process	None		
Typical shrinkage	0.6 %		

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications.

# Handling procedure

## Casting procedure

- Shake unopened A and B component cans vigorously for 10 s to 15 s
- Pre-heat mold 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 mold 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 1 % of total weight colour pigment

## Product information

- **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 can in oven at 70 °C for 2 hours to 4 hours and stir afterwards.



Please follow the procedure for preparing the vacuum casting system as described in the system operation manual!



Always observe the instructions in the Safety Data Sheets of the product 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 Safety Data Sheets.

