

GR100

A two-part, low viscosity isocyanate free filling and jointing compound

Application	Key Properties
<ul style="list-style-type: none"> Electrical potting Cable jointing Off shore and low temperature potting 	<ul style="list-style-type: none"> Cures at 0°C Negligible exotherm Easy to mix and process Dig-outable Good tack and adhesion to plastics Convenient mix ratio Excellent water resistance

Description	
• Basic	Two-component filled resin system
• Resin	AR100
• Hardener	BR100

Physical Data (approx. – values)	Resin	Hardener	Mixed
Colour	Yellow/Orange	Tan	Tan
Specific Gravity	0.9	1.43	1.26
Viscosity (mPas) @ 25°C	1300	17000	7000

Cure Schedule (150ml)	Working Life	Gel time	Tack Free time	Light Handling	Full Cure
Temperature	(minutes)	(minutes)	(minutes)	(hours)	(hours)
20°C	20	45	n/a	3	24
40°C	-	-	-	1	6
60°C	-	-	-	0.5	4

*RT is defined as 20-25°C

The above are typical values and will vary depending on the cured mass and application. Hotter temperatures may be used for faster cure but will result in higher post cure shrinkage and higher cure exotherm. Experimentation and testing is suggested to avoid side effects. For maximum properties a post cure may be required – Contact our technical service department for advice.

Processing	
Mix ratio by weight	0.31:1
Mix ratio by volume	0.50:1

Approvals	
RoHS compliant	Yes
UL94 V-0	No
REACH (SVHC concentration)	Refer to SDS

Typical Properties – 24 hour cure @ RT		
Hardness	A10	Shore A
Operating Temperature	- 55 to +80	°C (application & geometry dependent)
Max. Elongation	~300	%
Tensile Strength	0.55	MPa
Water Absorption (7 days @ RT)	0.082	%
Permittivity	4.1	@100Hz
Surface Resistivity	6.9x10 ¹⁴	Ω
Volume Resistivity	9.2x10 ¹²	Ωcm

Packaging
Available in Twinpacks and bulk

Availability
Through sales@robnor.co.uk distribution and www.resins-online.com

Twinpacks Part Numbers	
GR100/NC/100	GR100/NC/500
GR100/NC/250	

Twinpacks are pre-weighed resin and hardener components contained in a tough flexible film, separated by a removable clip and rail.

Once the clip and rail is removed the resin and hardener is thoroughly mixed within the bag and is immediately ready for use. Mixing will normally take ~ 2 minutes due to the viscosity; but pay special attention to the corners.

Twinpacks are ideal for small to medium production runs, prototyping and on-site or field use.

The twinpack weight/volume may also be tailored to a specific size on request.

For further details please visit www.robnor-resinlab.com

Bulk Materials Part Numbers	
AR100/NC/5KG	BR100/NC/5KG
AR100/NC/20KG	BR100/NC/25KG

Both resin and hardener are supplied in 5kg, 25kg and 200ltr drums and fully evacuated and ready for use.

Care should be taken to ensure when mixing the resins air is not entrained in the mixture.

If this is unavoidable the mixed resin and hardener should be re-evacuated before dispensing.

The bulk resin and hardener materials can be dispensed from suitable dispensing machinery, details provided by Fluid Research on request.

Kits and Sets Part Numbers	
Available on Request	

Kits and Sets are provided in separate containers to the correct ratio.

In Kit form, pour the contents of the small container into the larger container and use it as a mixing vessel.

Stir well using an appropriate mixer until homogeneous.

Note: Incomplete mixing will be characterised by erratic or partially incomplete cure even after extended time periods.

Cleaning

All equipment contaminated with mixed material should be cleaned before the material has hardened.

TS130 is a suitable non-flammable cleaning agent, although other solvents may be found suitable.

TS130 will also remove cured material provided it is allowed to soak for a number of hours.

Storage and Shelf Life

Material stored in the original unopened containers under cool dry condition between 15° and 25°C will have a shelf life of at least one year. Once used the containers must be kept sealed to prevent effects from water, air or contaminants.

Health and Safety

Please refer to AR/BR100 Health and Safety data or our Technical Service Department for individual/specific advice.

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The results and information above does not constitute a specification and is given in good faith and without warranty. The information is derived from test/or extrapolations believed to be reliable and is quoted for guidance only. The product is offered for evaluation on the understanding the customer satisfies himself that the product is suitable for the intended application by proper evaluation and testing.

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