



Replication Technologies Limited
Unit 38, Hillgrove Business Park
Nazeing Road, Nazeing
Waltham Abbey
Essex
EN9 2HB
Tel: 01992 892 894
Fax: 01992 892 901
Email: enquiries@reptech.co.uk
Website: www.reptech.co.uk

ADSIL 51-80

ADSIL 51-80 Is an addition-curing **RTV Silicone** Rubber that has been developed specifically for the production of rapid prototyping and other moulds used for the casting of polyurethane, epoxy and polyester resin parts. Adsil 51-80 is particularly recommended for use in the production of castings by the RIM method where parts are not too complex and where extreme dimensional tolerances must be achieved.

ADSIL 51-80 is characterised by good strength, easy cutting, long-life and a very low mixed viscosity. Available in 21Kg. and 210Kg. Kits. Due to its low coefficient of thermal expansion and its relatively high thermal transmission, Adsil 51-80 is suitable for casting of thermoplastic and wax based materials.

PROPERTIES

Mixing Ratio A:B (volume)	7.4:1
Mixing ratio A:B (weight)	100:10
Colour	Creamy white
Mixed viscosity	55,000cps (viscosity increases on storage)
Density	1.35
Gel time @ 25 C	70 minutes
Hardness Shore'A' (7 days R.T.)	80
Demould time @25C	18 hours/overnight
Tensile Strength	7 Mpa
Elongation at break	30%
Shrinkage under room temperature cure	<0.05%
Tear Strength	7N/mm
Shelf life	12 months when stored in clean & dry conditions

INSTRUCTIONS FOR USE

Weigh the individual components on accurate scales. For optimum performance and material properties, the ratios of 'A' to 'B' should be better than +/- 3%. Mix intensively until the mixture is a homogeneous, creamy mass. It is strongly recommended that the mixed material should be poured into a second mixing vessel and remixed before pouring or degassing. Always mix in a vessel at least 5 times the volume being mixed. Failure to do so can lead to loss of material on degassing.

Degas before pouring into the mould. If the master shape is a complex one or has undercuts, the mould should be subjected to a second degassing operation. Work quickly.

Inhibition is a source of problems for all Addition-curing RTV Silicones. Certain chemicals will interfere with the curing process, and in some instances can destroy the ability of the RTV to cure completely. Avoid tin based materials, sulphurous (eg. Natural rubber including natural rubber gloves), neoprene and other materials that are well documented. If a cast is found to be sticky, cut the mould in half. If the centre of the mould is cured and dry, it proves the presence of surface inhibition.

The information herein is offered in good faith based on Replication Technologies Ltd research and is believed to be accurate. However because conditions and methods of use of our products are beyond our control, this information

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