



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 51-40 D/B

ADSIL 51-40 is an addition-curing **translucent RTV Silicone** mouldmaking 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 51-40 is characterised by good strength, easy cutting, long-life, a user friendly 5:1 mixing ratio and a very low mixed viscosity. If mixing is by the metering static mix technique, where a 5:1 ratio may not be possible, a 10:1 version can be manufactured. Available in 24kg and 240kg kits.

ADSIL 51-40 is available in two formats, Adsil 51-40D and Adsil 51-40B. For pigmented casting, the 'B' variant gives easier demould and longer mould life. Unfortunately, when casting crystal clear parts or parts that are intended to be sprayed, the 'B' version is not recommended, and the 'D' version should be employed.

PROPERTIES

Mixing Ratio A:B (volume)	4.6:1
Mixing ratio A:B (weight)	5:1
Colour	Clear, translucent
Mixed viscosity	21,000cps (viscosity increases on storage)
Density	1.08
Gel time @ 25 C	70 minutes
Hardness Shore'A' (7 days R.T.)	40
Demould time @25C	18 hours/overnight
Tensile Strength	5.8Mpa
Elongation at break	300%
Shrinkage under room temperature cure	<0.05%
Tear Strength	18 N/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.

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