

## Key Features

**AMSIL Silicone** is a 2-part RTV (room temperature vulcanizing) high performance, tin/condensation cure mould making silicone. These silicone's can be poured or brushed onto a variety of surfaces to produce block, cavity or brush-on moulds. A variety of materials like polyurethane, polyester, epoxy, gypsum plaster, cement, wax, soap, low temperature melt alloys etc. and can be cast into these moulds.

## Physical Properties

	Mix Ratio (Parts By Weight)	Pot life	Demould time	CPS viscosity	Shore A Hardness +/- 2	Tear Strength N/mm	Elongation at break	Linear Shrinkage	Specific Gravity
<b>Amsil 10</b>	100A : 2B	30 mins	24 hrs	14 000	10	24	620%	0.3%	1.12
<b>Amsil 25</b>	100A : 2B	30 mins	24 hrs	20 000	25	30	510%	0.3%	1.12
<b>Amsil 30</b>	100A : 2B	30 mins	24 hrs	12 000	30	29	510%	0.3%	1.12
<b>Amsil 40</b>	100A : 2B	30 mins	24 hrs	24 000	40	26	430%	0.3%	1.12

Please note that the values shown are typical values for your guidance. They are not to be taken as specifications and are subject to certain variability. Please consult the sales specifications for details.

## Processing

Before measuring out the components, pre-mix Part A and Part B separately (this mixes any components that may separate during storage). Measure out required amounts of Part A and B into mixing container, and mix thoroughly for 3 minutes making sure to scrape the sides and bottom of the mixing container several times. Transfer mixed material into clean mixing container and stir again. Be careful not to whip and beat the material during the mixing process as this introduces unnecessary air bubbles. For best results after mixing, vacuum de-air material before casting (29 inches of mercury required) and allow for up to 5 x expansion during the vacuum process. For a longer pot life catalyst can be reduced to 1.5%. For faster demould time, catalyst can be increased to 3% (please note that this will decrease pot life). Above mentioned percentages are by weight.

## Mould Performance & Storage

The physical life of the mould depends on how you use it (materials cast, frequency etc.). Casting abrasive materials such as concrete can quickly deteriorate mould detail, while casting non-abrasive materials like wax or plaster will not affect mould detail. Before storing, the mould should be cleaned with soap & water solution and wiped fully dry. Two part (or more) moulds should be assembled. Moulds should be stored on a level surface in a cool, dry environment. Casting Plaster into the mould prior storing will extent mould library life.

**For Brush-On applications** and for the silicone to hold a vertical surface, Silicone Thixo (Thi-Vex II) should be added to increase viscosity. By weight 0.5% (thick), 1% (thicker), 2% maximum dosage (thickest).

**For Block & Cavity moulds** (where the silicone is poured) Silicone Thinner can be added to reduce viscosity which assists in reducing air bubbles and capturing intricate surface detail. Max dosage by weight 10%. Please note that by adding Silicone Thinner, Shore A hardness and tear strength are proportionally reduced.

**Pouring** - for best results, pour the silicone rubber in a thin stream to the lowest part of the mould in a single spot and allow material to flow around the model and self level. It is suggested to cover the model by at least 10 mm.

**Curing/Post Curing** - allow the mould to cure for 24 hours at room temperature (23°C) before demoulding. Post curing the mould an additional 4-6 hours at 80 °C will eliminate any residual moisture and alcohol that is a by-product of the condensation reaction that can inhibit the cure of some urethane resins and rubbers. Allow mould to cool to room temperature before using. Do not cure rubber where temperature is less than 23°C. The silicone moulds can be cleaned with mild soap and water then rinsed and left to dry.

**Disclaimer**

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