

HOW TO USE SILICONE MOULDS FOR CASTING POLYURETHANE RESINS

Our resin of choice is CraftCast which is a polyurethane resin that sets to a white, hard, rigid plastic in 3 minutes and can be taken from the mould in 10 minutes. It is ideal for casting a wide range of items from figurines to vintage car accessories, toy train parts, model aeroplane parts, jewellery and rigid plastic components of all kinds.

It has none of the objectionable smell of polyester resins, which must be cast in well ventilated areas. CraftCast is an easy mixing two part resin that uses equal **volumes** of resin and hardener. This saves the necessity of owning expensive weighing equipment so often necessary with resins.

Due to the rapidity of the setting time of this resin it is essential to have everything ready before you start. Remember the warmer the room the faster the reaction and this applies to the resin itself. One way to slow things down is to cool the resin in a refrigerator prior to mixing.

EQUIPMENT NEEDED

- Disposable glass or plastic mixing containers and measuring containers.
- Disposable wood or plastic stirring sticks
- Paper towels and newspapers to cover bench tops and clean up.

PREPARATION OF THE MOULD

Make certain the mould is absolutely dry. Polyurethanes of all types will foam up in the presence of water. They also will stick to most substances if a mould release is not used. The simplest release agent to use is petroleum jelly (Vaseline) . Turn the mould inside out and rub the jelly all over the interior of the mould in a thin film. Wipe any excess off with a paper towel. Be careful not to miss any areas.

SUPPORT THE MOULD

Support the mould for casting in a hole cut in a cardboard carton (as described elsewhere).

MIXING THE RESIN

Use two different measures to measure an equal quantity of Part A resin and Part B hardener and pour into two disposable paper cups. It is a good idea to keep the measures marked PartA and PartB and set them aside for this measuring use only.

FILLING THE MOULD

When you are ready pour Part A and Part B into a third clean and dry mixing cup. Stir slowly but thoroughly, for 30 seconds, with a flat wooden stirrer and then pour into the mould. Flex the mould gently with one hand as you pour, to ensure that the resin gets into all corners of the mould.

Tap gently against the mould to bring any air to the surface. As both Part A Part B are the viscosity of water the bubbles will disappear rapidly.

It is obvious you must work quickly with the mixing and filling of the mould as you only have 3 minutes. We work with a clock to ensure that during the last minute the mould is left stationary to finally set hard.

RELEASING THE CASTING

You will notice the contents of the mould gradually change from a more or less colourless mixture to have specks of white and then suddenly it is totally white and very hard. It is a fascinating process to watch and for first time users quite startling.

It is usually safe to demould the casting after about 10 to 15 minutes.

Soap the outside of the mould with warm soapy water or dish washing liquid and gradually start peeling the latex mould away from the base. Gradually strip from the rest of the casting. Don't be rough at this stage or you may damage the casting. When removed the casting will feel tacky for a while, but this will disappear.

SAFETY PRECAUTIONS

Keep out of the reach of children. In case of ingestion do not induce vomiting. Give 1 to 2 glasses of milk or water to drink. See a doctor. Use with rubber gloves. In case of skin contact wipe off with methylated spirits and then wash with soap and water. Wear eye protection. In case of eye contact, flush with water for at least 15 minutes and see a doctor. Wash thoroughly after using. Always read and follow use and safety recommendations.