

Product Data Sheet:

Eli-Dome

Polyurethane Doming
Resin



Eli-Dome is a two-part, water clear polyurethane resin used to dome or encapsulate a wide variety of items.

The kit comprises all the items needed to begin doming:

- 2 x pre-filled resin cartridges (each cartridge contains 25ml resin & 25ml hardener)
- 1 x resin applicator gun (re-usable)
- 6 x disposable bayonet static mixing nozzles (6.3mm x 17 element)

Eli-Dome provides a glassy finish and is UV stable. The resin is free flowing and self -levelling offering excellent surface penetration and providing a 3D lens on the surface of your component.

The resin can be used to cover emblems, decals & stickers logos, key fobs & signs, promotional items and automotive badges.

Ensure that the working area is clean, dry and warm. A constant temperature of between 18°C and 24°C and a relative humidity of 35% is ideal, although not essential. Polyurethane resins react with moisture therefore it is essential to control the humidity of the doming area.

Before you intend doming, stand the cartridges upright so that any bubbles rise to the top. Place the articles to be domed as flat as possible, taking care to avoid raised areas. This will ensure that the coating will cure to give the same thickness over the whole article.

HOW TO USE IT:

Gun Assembly

Before inserting the resin cartridges into the dispenser gun, check to ensure that small deposits of hardened polyurethane resin have not built up around the sealing rings in the necks of the cartridge tubes. Assemble the gun as shown in the photographs. Unclip the cartridge retaining hinged bracket and insert the plunger into the gun handle, then insert the dual-barrelled cartridge into the retaining bracket, ensuring that you hold the gun with the cartridge facing upwards to prevent bubbles returning to the resin. Remove the cartridge cap, slowly squeeze the handle so that resin and hardener rise to the top of both tubes. Expelling any air bubbles and ensure that the polyurethane and hardener fluids are balanced. It is important to make sure resin shows at both apertures before proceeding. Then attach the mixing nozzle still keeping the cartridge pointing up, slowly squeeze the mixture along the tube and turn from side to side to dispel air bubbles, and to ensure that the fluids are thoroughly mixed together (See drawing below)

Using the doming applicator

Hold the gun with the nozzle about 1 inch above the article and gently squeeze the handle. The amount of resin necessary to dome your item will be found by trial and error. You may find you need less than you think. Aim to cover approximately two-thirds of the area to be domed. Extra resin can always be applied some minutes after the first application, depending on room temperature. After applying the resin, wait a few minutes and then carefully examine the domed article. If you notice small bubbles, you should remove them by applying heat from a hot air gun / hairdryer. Hold the gun 10cm from the resin dome and apply a very short burst of no more than 2-3 seconds. The heat will cause bubbles trapped under the surface to expand and break through the resin surface. This can only be done before the resin cures.



Safety

Make sure that you take adequate health and safety precautions. Do not use the doming kit in confined spaces and make sure that there is a constant supply of fresh air. Always use protective gloves and safety glasses. Avoid touching your face while doming, particularly around your eyes. Do not consume food or drink whilst using polyurethane. Dispose of all unwanted materials, mixer tubes, spent cartridges and dispensed resin in accordance with local waste removal regulations.

Cleaning the applicator gun

When you have finished doming, clean the application gun thoroughly to avoid build-up of resin residue on the pistons and ratchet. Acetone is suitable for this purpose. Acetone is very flammable. Do not use where open flames exist. Always use gloves and safety glasses when cleaning the equipment.