

## DOMING

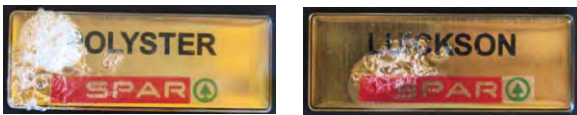
All you need are printed and kiss-cut decals (stickers). Doming resin to produce high quality 3D labels and badges. A great way to add value to a product. Inexpensive to set up & easy to use.

### POINTS TO TAKE CARE OF WHEN DOMING

#### MOISTURE:

Moisture is the biggest enemy in the Doming process. Even the tiniest amount will cause bubbles in the dome and possible sticky patches where the resin has not set.

In severe cases, portions of the dome will 'erupt'. See picture below:



This was most probably caused by a finger print on the surface before doming.

#### PREVENTION:

The ideal environment would be an air conditioned room at about 16°C with a relative humidity of less than 40%. This said, a lot of very successful doming takes place in rooms with temperatures up to 23°C.

- Definitely NOT in kitchens or bathrooms.
- Use a mask over your nose and mouth or dome under a sheet of glass to prevent breathing on your work.
- Keep hot beverages (tea, coffee, etc.) out of any room where you are doming.
- Make sure that the objects you are doming and the doming resin are at approximately the same temperature.
- If you need to wipe your material before doming, use a clean, dry cloth. Do NOT use alcohol or methylated spirits as these will leave moisture on the surface once the alcohol has evaporated. If you need to use a solvent, then use acetone and make sure it is dry before you dome.
- Do not touch the surface to be domed with your hands or fingers.
- If you have concerns about moisture on your work, put it in an oven at 40°C for about 15 minutes. Let it cool of in a dry place before doming.

#### RESIN STORAGE:

- The doming resin is supplied in sealed packets purged with dry nitrogen to ensure that it is not contaminated by moisture. These sealed packets, if kept at a temperature of less than 25°C, could be stored for up to a year.
- Once the sealed packet is opened, the cartridge would have a shelf life of a few days if stored in an environment where the temperature is less than 23°C with a relative humidity of less than 40%. If you need to store it for a longer period, then place the un-used cartridges in a 'zip-lock' plastic bag and seal it with as little air as possible inside. Place the plastic bag in a refrigerator until you need to use it again. When removing it from the refrigerator, allow it to warm up to room temperature before opening the plastic bag.





## THE DOMER'S NIGHTMARE

Everything look great last night - why has this dome exploded?

Polyurethane resins reacts violently with moisture - this is a slow process and normally takes 4-5 hours to occur. It can take many forms, a worse case scenario is illustrated here. 90% of the time, small bubbles will appear the next morning, or the surface of the decal will remain "sticky" if not properly set. The first is caused by moisture on the surface of the decal before doming, and the latter by moisture on the surface of the dome after doming. To avoid this, wipe the decal with a clean dry cloth before doming and do not breathe on or touch the decal with your fingers. Ideally you should dome in a clean, dry and air-conditioned room.

### SAVING MONEY:

Placing the gun, resin cartridge and mixer assembly in a refrigerator, will stop the curing process, allowing you to take that phone call or call of nature. Make sure you wipe the assembly down with a dry cloth when removing from refrigerator.

### SAVING TIME:

Placing the glass sheet with the domed decals in a preheated oven (40° degrees C) will reduce the cure time from 4 hours to 20 minutes.

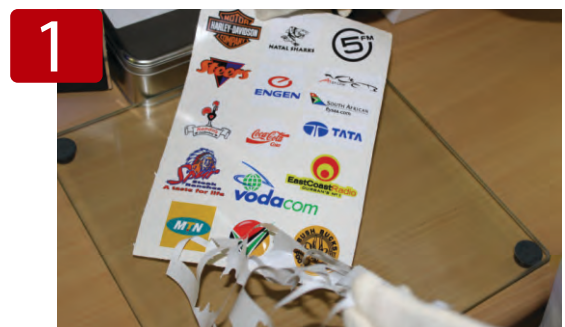
### YOU WILL NEED THE FOLLOWING ITEMS:



- Heat source
- Dispensing gun
- A good supply of paper towels
- Glass spacers
- Non-sterillised gloves
- Resin cartridge twin pack
- Safety goggles
- Static mixer
- Scalpel
- 3 or more glass sheets - laminated glass, edge around

Important: Please do not use plate glass!  
Glass is dangerous!!

### STEP BY STEP INSTRUCTIONS:

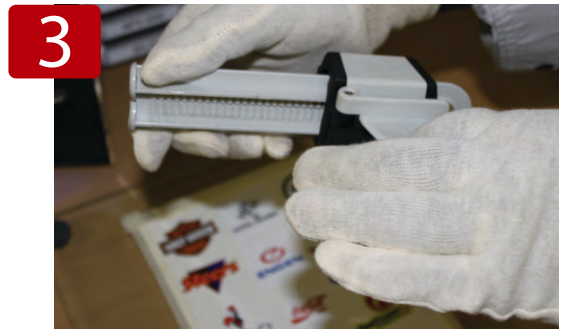


Make sure your table is level. Weed your printed work to prepare it for doming.





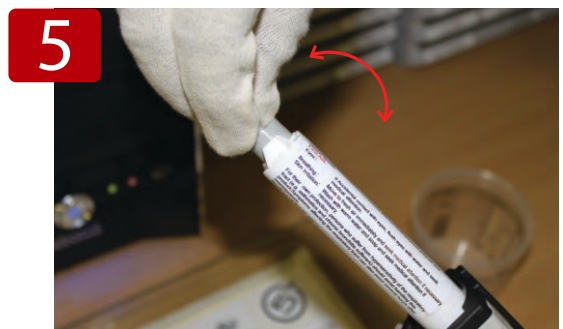
Lay your work on a flat glass sheet - use masking tape to secure.



Place plunger into dispenser, ensuring serrated edge faces the handle - making sure the plunger is all the way home.



Making sure the plunger is all the way home, lift the flap and place the cartridge into the dispensing gun.



Remove the safety cap from the cartridge by turning 90° and gently pulling.



Be sure to wipe the night cap, once removed, to avoid complications later when resealing.



Squeeze the dispenser until both cylinders are ejecting resin. Make sure the cartridge is inclined as show in the image. (Back lower than dispensing tubes).



Now attach the static mixer to the cartridge. Aligning the tubes on the cartridge, gently push them together.



Turn the retainer nut 90 degrees to lock the mixer into place.



Pull gently on the trigger until the resin is ejected from the end of the static mixer. Make sure that the cartridge is inclined as shown in the image.



Wipe excess resin from the static mixer.



Dome your decals by gently squeezing resin onto the surface. Be careful not to apply too much or too little (this will come with practice). The resin will automatically move toward the silicon coated backing paper. Don't worry if it doesn't move all the way to the edge of the decal - you'll have time to correct this later.



If any bubbles appear on the surface of the domed decal - use a gentle heat source (such as a hair dryer or flame) to pop the surface bubbles. Do not apply flame directly to the resin.



Repair decals that have uncovered areas by dragging the resin gently outwards with a scalpel or utility knife.



Next, place a sheet of glass on spacers over the domed decals to prevent dust, etc. from affecting your decals and allow you to dome the next set of decals. Repeat as many layers as required.