

GEDAKOP® Instruction Sheet

PROCESSES INVOLVED IN PREPARATION OF ANODISED PANELS / SIGNS / LABELS (IG100)

1. ARTWORK

Any opaque copy on a transparent/translucent carrier or photographic negative may be used. It should be appreciated that the opaque areas are those to be coloured and that the finished product is dependant directly on the artwork's quality and definition. LaserStar artwork media for printing via a Laser printer is ideal.

Note: If large numbers of small panels are required the artwork can be "stepped and repeated" for more efficient multi production.

2. UV EXPOSURE UNITS.

Evaluate your maximum anticipated panel area before choosing from a Mega range, which covers working areas from 9" x 6" up to 36" x 20" with tubes in base or lid. The latter is vital if registration of more than one artwork is considered, but vacuum is not required unless very large panel areas are involved, or extremely fine line resolution.

3. HANDLING

The GEDAKOP sheets arrive sealed from light, but with the photoresist both SOFT and SENSITIVE TO UV LIGHT. Therefore open and pack well away from the sun's rays – preferably in amber safelight conditions when precautions are less necessary. Having removed one sheet with its covering paper by touching the sides only, reseal the pack immediately.

For thicknesses up to 1.5mm, the Mega Shears, (8", 12", 18" or 25") are ideal but 2 – 3mm sheets will require either sawing or a heavy duty guillotine, when it is recommended that the presensitised sheet is cut slightly oversize, then trimmed exactly after sealing.

The GEDAKOP coating is actually of two layers, the upper being UV sensitive and the lower a surface protector, which is removed by an additive in the dye, the GEDAKOP Thinner or SENO Universal Solvent.

4. EXPOSING

Place cut sheet and artwork (EMULSION/TONER DOWN) in UV unit so that the UV light will shine through the artwork onto the presensitised surface. Expose for approximately 60 seconds – this time will depend on quality of artwork and type/size of UV, and trial runs with small sample sheets are recommended for the inexperienced. Remove sheet from unit and a faint image of the design will have appeared where the photoresist has not been hardened. Still handle carefully.

5. DEVELOPING

Simply wash off under a cold water spray. DO NOT WIPE. Then inspect to ensure all traces of the soft photoresist have been washed away to reveal a clean cut aluminium surface. If lines have narrowed or disappeared, there was insufficient contact between photoresist surface and artwork, or the exposure time was too long, or the emulsion side was up. If the edges are fuzzy and the photoresist tacky, then the exposure time was insufficient.

Excess water is removed by placing plate between sheets of lint free paper (newspaper is ideal) and blotting carefully with a smoothing rather than dabbing action. Dry gently, but thoroughly with warm air from either a hair dryer or a convector heater. Traces of moisture will affect the colouring process.

Although firmer, mistreatment can still damage the photoresist surface which should now be inspected for pin-holes or marks (easily rectified by painting on GEDAKOP Touch-up fluid and drying again).

6. DYEING

There are many ways to apply the dye depending on whether large or small areas are involved, and if multi colours are required, on the spacing between the areas of colour – overlapping will cause the dyes to mix. For large areas HB104 pads, for small areas, women's nail buds, cotton rag, pads fashioned as a 'bud' or artists brushes. Do not use absorbent paper or excess of dye, and you may prefer to wear disposable gloves.

SINGLE COLOUR

Select dye, drop a puddle onto the area to be covered and spread evenly over the aluminium surface to include the surrounding edges of the photoresist. Do not dab or attempt to fill in the design artistically. Allow the dye to break down the protective layer and to penetrate the pores of the aluminium for around 20 seconds.

Using tissues firmly wipe across the dyed area to remove as much excess dye as possible. The dye will be spread thinly over the photoresist surface. Inspect for adequate dye coverage and density of colour and repeat for any unsatisfactory areas.

MULTI-COLOUR

A number of options are open to you which depend on the areas involved, the relative closeness of the areas and the expertise gained. It should be appreciated that when the excess dye is removed, the spreading effect could contaminate a previously coloured area or open pored aluminium awaiting a different colour.

- a) **Wide spacing**
Simply repeat as for single colour and when wiping off, do so in a direction away from other colour(s).
- b) **Use of Plancal Masking Film (800-056)**
This can be used to mask areas of the panel you do not want dyed a particular colour. It is particularly useful when two different coloured areas are close together. Once one area is dyed and dried apply Plancal to this section and dye the remaining area. Plancal prevents the dye passing into the surface and like low grab adhesive does not damage the photoresist.

7 STRIPPING

Put solution into an atomised dispenser and spray directly onto the plate inside a sink and again wipe off photoresist,

Always wash plate thoroughly before next process.

8 FINISHING

A. *Prototype standard*

Wash under tap and if required freshen up finish by wiping over the non-dyed areas with a solvent. The colours and surface will not be impervious to damage and solvent contact will cause the dye to smear.

B *Full sealing*

Immerse plate in water at 95°C containing Gedaseal at 25ml / 1 Litre for at least 40 minutes. This process completely seals the pores on the aluminium surface thereby trapping the dye. Again freshen up, but wiping with Seno Universal Solvent. Your anodised panel is now permanently scratch resistant and fade, rust, weather and solvent proof.



Mega Electronics Limited
Mega House, Grip Industrial Estate,
Linton, Cambridge, CB1 6NR. England.
Telephone: +44 (0) 1223 893900
Fax: +44 (0) 1223 893894
email: sales@mega.uk.com
WEB: www.mega.uk.com