

## RESIN COMPARISON GUIDE Why we only use 2-part OEM Grade Resin

Resin badges can be made using a number of technologies, some options are much cheaper than others and you will get what you pay for unfortunately. Two key considerations when making your decisions should be:

## **ADHESIVE TYPE:**

Different surfaces require different adhesives. Make sure the base stock specified has the appropriate adhesive for your products. Sun Industries has a wealth of knowledge in this area and can provide advice and samples for testing.

## **TYPE OF RESIN:**

There are two types of resin that can be applied to your badges. Two Part OEM Grade Resins (used by Sun Industries) and Single Part UV Cured Resins. There is a large difference in both the price and quality of these resins and it is important that you are selecting correctly for your application. Use the table below as a guide.

Consideration	2 Part OEM Resin	Single Part UV Resin
Outdoor Resistance	Very Good: No yellowing, minimal gloss change after 2 years.	Not Good: UV Resin continues to cure. Yellows, hardens and cracks in less than 3 months.
OEM Automotive Grade Compatability	<b>Yes:</b> Able to meet all OEM Grade Requirements.	<b>No:</b> Not suitable for OEM Grade Requirements.
Size of Resin Badge	Any Size: Small to large sizes with no difference to quality.	Small Only: Larger sizes will curve upwards as the UV resin continues to cure.
Bonding of Resin to Substrate / Inks	Homogenous polymerisation: Creates excellent bond with no shrinkage.	Only Good with some: UV resin shrinks slightly on curing and can cause problems with bonding.
Hardness	Stable Properties: Resin has excellent elasticity and can reshape if damaged.	Continually hardening, especially outdoors: Will eventually crack.
Ability to Form Complex Shapes	Very Good: Natural viscosity allows for complex shapes.	Ok: Will spread to some areas but can be to viscous to flow easily.
Promotional / Short Life Products	Good: Able to be produced in short runs.	<b>Good:</b> Able to be produced in short runs if low product life is required.
ROHS / Directive Compliant	<b>Yes:</b> Approved for use with Microsoft, Sony, Motorola, NEC, Nokia, Volvo.	Check with supplier.

UV cured badges are ok for cheap promotional or short life products. However, if your requirements are longer term or for outdoor use then 2 part OEM resins are the best option.

For further information, samples or technical data sheets please contact either myself or John Stoneham on 1800 999 418.

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