

## Frequently asked questions about Alcolin PU Sealant & Adhesive

### 1. What is a “grab” adhesive?

This is an adhesive designed with a strong wet tack which enables the adhesive to grab or hold the substrates together without the need for clamping or any other fixing method such as screws or nails. Grab adhesives have found an application niche whereby people want to mount objects onto walls quickly, aesthetically, and without the use of drills, nails, screws and hammers.

### 2. What is the difference between a “grab” adhesive and a sealant?

The primary function of a grab adhesive is to bond substrates together while the primary purpose of a sealant is not to bond but to seal a joint or space against movement of liquid, gases or solid material. Sealants are generally required to have good flexibility. Many sealants can act as good adhesives, but don't have the wet tack required specifically of a grab adhesive. Alcolin Polyurethane Sealant & Adhesive falls in the gap between a grab adhesive and a sealant and performs both functions.

### 3. Why should I use a Polyurethane Sealant over a silicone sealant?

If your joint or glue-line needs to be painted over, then use a Polyurethane sealant as silicone sealants cannot be painted over. Polyurethane sealants are suitable for use in contact with most building materials whereas acid curing silicone sealants are not suitable for adhesion to cement and concrete and other strongly alkali surfaces.

### 4. Why should I use a Polyurethane Sealant when I can use a cheaper acrylic sealant?

Polyurethane sealants come into their own if you need a high performance paintable sealant – they offer excellent water resistance, bond strength and superior movement accommodation compared to typical acrylic sealants.

### 5. What adhesive can I use to glue expanded polystyrene foam to itself?

The adhesive providing the best bond to expanded polystyrene is Alcolin Waterproof

Where a high wet tack / grab is required, there are a number of grab adhesives that are also excellent for the job : Alcolin Fix All, Alcolin Polyurethane Sealant & Adhesive, Alcolin MS37 1000 Uses, and Evostik Sticks Like. Silicone sealants are also good for the job.

Bostik Mount It is a waterbased grab adhesive that is suitable for the job. Acrylic Sealant and Alcolin Cornice adhesive are also suitable. These products are all waterbased and for this reason they perform best only when gluing small parts of EPS to itself or when bonding EPS to a porous surface.

### 6. Can I use Alcolin Polyurethane Sealant & Adhesive to bond two non-porous surfaces together?

Yes as the product is reactive curing and does not require any evaporation of solvent to completely cure.

**7. What is the best adhesive to glue up a mirror?**

Bostik Mirror is the best adhesive to use if gluing the mirror directly to a ceramic, cement or brick surface. The Bostik Mirror is neutral curing and will not desilver the mirror over time. Bostik Build is another neutral curing silicone will also work well for this application. Do not use acid curing silicones as the acid that is released during the curing process will desilver the mirror. Alcolin MS 37 1000 Uses and Evo-Stik Sticks like are also ideal for mounting of mirrors. If gluing the mirror to surfaces such as supawood or melamine, Alcolin Fix All or Alcolin Polyurethane Sealant & Adhesive would be more suitable.

When gluing mirrors, apply the adhesive in vertical lines with a space of approximately 2-3cm between each line. Do not use a perimeter glue line as this will prevent the glue from drying.

**8. How do I clean up Alcolin Polyurethane Sealant & Adhesive?**

A cloth soaked in acetone, alcohol or mineral spirits should do the job prior to drying. Once dried, scraping or sanding works well, alternatively, use a solvent based paint stripper. It is best to clean the glue before it dries.

**9. How do I use Alcolin Polyurethane Sealant and adhesive?**

For *mounting and gluing up of panels* and apply the product to one of the surfaces in 5mm wide, parallel, short and non-continuous vertical beads down the length of the board. This will allow air flow through the joint. The vertical beads should be spaced at approximately 20cm apart across the width of the panel when gluing standard light panels. For beads spaced at more than 20cm, a perimeter bead should be applied. For heavy boards, space beads 10cm apart, and for flexible boards, space beads at 5cm. After application of adhesive, press the panel firmly onto the surface ensuring complete glue transfer to the other surface. It is advisable to hold the panel with chocks or other system for at least 24 hours and longer for very heavy panels.

As a *sealant*, apply in a continuous bead to the prepared joint. Use masking tape to get a clean, even sealant line and to eliminate cleaning difficulties on porous surfaces. Be sure to remove the tape before sealant begins to skin. Smooth down after application before skin formation occurs, by using a flat or rounded tool.

**10. When using Alcolin Polyurethane Sealant & Adhesive, do I need to support or clamp the two surfaces together?**

Clamping is not necessary, unless the material to be bonded is very heavy, in which case it will be necessary to hold them for some time until the adhesive dries completely.

**11. I need a high quality silicone that I can paint over?**

You cannot paint over a silicone sealant. You need to use an acrylic sealant ie. Alcolin Acrylic, a polyurethane sealant i.e. Alcolin Polyurethane Sealant & Adhesive, or one of the new hybrid silicone technologies, such as Alcolin MS 37 1000 Uses or Evo-Stik Sticks like. These hybrid technologies can be painted over with most kinds of paint - water-based, solvent based, epoxy or polyurethane paints.

**12. I was advised to use a polyurethane sealant but I am worried about the hazardous isocyanates it gives off. What else can I use?**

Alcolin MS 37 1000 Uses, Alcolin Expansion Joint Sealer, and Evo-Stik Sticks Like are new hybrid MS polymer silicone technologies that perform similarly to polyurethanes, however are isocyanate-free and have additional advantages of having superior UV resistance, curing faster at low temperatures, bonding to damp surfaces, and being odourless.

**13. I used an acrylic sealant to fill a crack in the wall above the window, but the crack keeps re-appearing. What else can I use for this application?**

A sealant with superior movement accommodation and adhesion properties is probably what is required, such as Alcolin MS 37 1000 Uses. It is also non-shrinking and paint-able. Evo-Stik Sticks Like and Alcolin Polyurethane Sealant & Adhesive are also ideal alternatives offering superior movement accommodation compared to acrylics, superior adhesion and very low shrinkage.

**14. We need an adhesive to stick stair nosing, what is the best product to use?**

At the high performance end, Alcolin MS 37 1000 Uses, Alcolin Polyurethane Sealant & Adhesive, Evostik Sticks like are all excellent choices, having a strong bond to cement, wood – coated or uncoated, ceramic and metal. They bond dissimilar substrates, are waterproof and have a long performance life. They are also ideal for stair treads. Evo-stik Gripfill adhesive is a solvent based grab adhesive that is also suitable for the task.

**15. We are looking for a sealant that can be placed on damp concrete?**

While Alcolin Polyurethane Sealant & Adhesive, it is best to use one of the new MS polymer hybrid silicone technologies such as Alcolin MS 37 1000 Uses, Alcolin Expansion Joint Sealer or Evo-Stik Sticks Like.

**16. I need glue for expanded polystyrene panels in cold rooms.**

Alcolin MS 37 1000 Uses, Evo-Stik Sticks Like and Alcolin Polyurethane Sealant & Adhesive and Bostik Build contain no aggressive solvents and will not attack expanded polystyrene. These are all perfect for this application and will bond all types of panels in a cold room, as it remains flexible down to - 40°C.

Acid curing silicone sealants release acetic acid on curing which may affect the metal surface to which the EPS will be bonded, and are therefore not suitable.

**17. Does Alcolin Polyurethane Sealant & Adhesive contain acid?**

Alcolin Polyurethane Sealant & Adhesive is neutral curing and is acid free and will not attack concrete, plaster and the foil backing of mirrors. It will not cause rusting or corrosion on unprotected metals such as iron and copper.

**18. Which sealant and or adhesive is most suited for fitting of skylights?**

Alcolin MS 37 1000 Uses is weatherproof, clear, has good flexibility and good adhesion to most materials used in fitting skylights. Evo-stik Sticks like and Bostik Build silicone sealant are good alternatives, and Alcolin Polyurethane Sealant & Adhesive also suitable if the glue line will be sheltered from direct light as it tends to discolour under direct UV light. A regular acid curing silicone sealant may not be suitable if sealing and joints are onto concrete or plaster.

**19. I need a universal adhesive to stick various components in a caravan.**

Alcolin MS37 1000 Uses, Evo-Stik Sticks like or Alcolin Polyurethane Sealant & Adhesive and sealant bond strongly to dissimilar substrates such as found in caravan construction e.g. wood, aluminium, glass, fibreglass and panels. These grab adhesives are flexible to ensure shock absorbency and movement against vibrations without delamination.

**20. A silicone sealant stained my granite top what can I use that won't stain it?**

Alcolin MS 37 1000 Uses, Evo-Stik Sticks like, and Alcolin Polyurethane Sealant & Adhesive are acid oil/plasticizer free and will not stain natural stone. The oils in most silicones can cause staining of natural stone tops, so it is not recommended to use silicone sealant for this application.

**21. Is Alcolin Polyurethane Sealant & Adhesive suitable as a sealant for joining a granite / natural stone table top?**

Yes as it is acid, oil and plasticizer free and will not stain / discolour natural stone.

**22. What mileage can I expect from a 300ml cartridge of Alcolin Polyurethane Sealant & Adhesive?**

Use the following formulation:

$$L = \frac{300}{W \times D} \quad \text{Where: } L = \text{Length of sealant in metres obtained per cartridge.}$$

$W = \text{Width of the joint in mm}$   
 $D = \text{Depth of the joint in mm.}$

A joint of 5mm width and 5mm depth yields approx. 12.0m per 300ml cartridge

A joint of 4mm width and 4mm depth yields approx. 18.8m per 300ml cartridge

**23. Is Alcolin Polyurethane Sealant & Adhesive suitable for building fish tanks / aquariums?**

No, must use a sealant that does not contain a fungicide e.g. Bostik Marine Silicone Sealant.

**24. Can I paint over Alcolin Polyurethane Sealant & Adhesive?**

Yes you can. Be aware that if the sealant experiences much movement, and the paint is less flexible than the sealant, then the paint can craze.

**25. How soon after I applied Alcolin Polyurethane Sealant & Adhesive can it be over painted?**

Water-based paints can be applied almost immediately and other paints must be applied when fully cured, usually about 1 to 2 days, depending on bead diameter.

**26. Does Alcolin Polyurethane Sealant & Adhesive bond to plastics?**

Alcolin MS 37 1000 Uses bonds to hard PVC, polycarbonates, fibreglass, ABS, and Perspex (methacrylates). It does not bond to some plastics like polyethylene, polypropylene and Teflon.

**27. I need a strong adhesive/sealant to adhere metal to metal on truck bodies**

Alcolin Polyurethane Sealant & Adhesive, Alcolin MS 37 1000 Uses and Evo-Stik Sticks like are excellent grab adhesives with very good vibration resistance. Since they are acid free they will not corrode metals.

**28. I am looking for an external wall cladding adhesive**

Alcolin MS 37 1000 Uses, Alcolin Fix All, Alcolin Polyurethane adhesive and sealant, Evo-Stik Gripfill, and Evo-Stik Sticks Like is suitable for all types of external cladding with natural stone, simulated stone and other cladding panels.

**29. Can Alcolin Polyurethane adhesive and sealant be used to fit windscreen glass on cars and trucks.**

No. We recommend that this job be done by a professional.

**30. Need a sealant for air conditioning and ventilation assembly**

Bostik Build, Alcolin MS 37 1000 Uses, Evo-Stik Sticks Like and Alcolin Polyurethane adhesive and sealant will work perfectly as they provide good adhesion, flexibility and airtight seals. Bostik Powermastik is a non-drying sealant also perfect for this application.

**31. Must Alcolin Polyurethane adhesive and sealant be used with a primer**

For most applications a primer is not necessary.

**32. Can Alcolin Polyurethane adhesive and sealant be used as a “no more nails” product?**

Alcolin Polyurethane adhesive and sealant will outperform most “no more nails” products in terms of adhesive performance, as it is not a true grab adhesive, it will require a longer setting time and depending on the weight of the object to be bonded, it may require additional temporary support to keep the object in position while it sets.

**33. Can Alcolin Polyurethane adhesive and sealant be used for applications permanently under water?**

No. While it is waterproof, it is not suitable for permanent underwater exposure.

**34. Can Alcolin Polyurethane adhesive and sealant be used to fit mirrors onto walls?**

Yes, the neutral cure system will not attack mirror backing. Apply adhesive in vertical lines with a space of approximately 2-3cm between each line. Do not use a perimeter glue line, as this will prevent the glue from drying. For very large mirrors we recommend the use of additional mechanical support.

**35. What adhesive would be most suitable to bond a structure that is vibrating continuously?**

One needs an adhesive that offers the flexibility of a sealant and the adhesion performance of an adhesive. Alcolin expansion joint sealer and Bostik build are ideal for this application. Alcolin MS37 1000 Uses, Evo-Stik Sticks Like and Alcolin Polyurethane adhesive and sealant will also work well for less severe vibrations.

**36. Want to glue a 1.5kg metal sign onto glass. There is only an area of 6cm<sup>2</sup> to which I can apply the glue.**

Due to differential expansion rates, adhesive must be flexible. The adhesive must be able to bond both metal and glass and should be neutral curing so it won't affect the metal. There are several choice: 1. Bostik Super Gasket 2. Bostik Build 3. Alcolin MS37 1000 Uses 5. Alcolin Polyurethane Sealant & Adhesive 4. Evo-Stik Stick like.

- The tensile strength of Bostik Super Gasket is  $2\text{N/mm}^2 - 20\text{kg/cm}^2$ , and will support a weight of 120kg for a  $6\text{cm}^2$  bond area (ideal conditions)
- Bostik Build has a tensile strength of  $0.5\text{N/mm}^2 - 5\text{kg/cm}^2 = 30\text{kg}/6\text{cm}^2$  bond area
- Alcolin 1000 Uses has a tensile strength  $1.25\text{N/mm}^2 - 12.5\text{kg/cm}^2 = 75\text{kg}/6\text{cm}^2$  bond area
- Alcolin Polyurethane Sealant & Adhesive has a tensile strength of  $0.75\text{N/mm}^2 - 7.5\text{kg/cm}^2 = 45\text{kg}/6\text{cm}^2$  bond area
- Evo-stik Sticks Like has a tensile strength of  $1.5\text{N/mm}^2 - 15\text{kg/cm}^2 = 90\text{kg}/6\text{cm}^2$  bond area

The strongest adhesive to use would be the Bostik Super Gasket.

