ALCOLIN SILICONE SEALANT

Description

ALCOLIN SILICONE SEALANT is a one-part acetoxy-curing silicone sealant that provides a permanent flexible watertight seal for general purpose sealing in and around the home.

Features & Benefits

- Non-sag – can apply on vertical surfaces
- Heat resistance up to +150°C
- Flexible at temperatures as low as -50°C
- Mould resistant – suitable for use in damp areas e.g. showers, bathrooms
- Versatile – adheres to a wide variety of substrates
- Waterproof – suitable for external applications
- Excellent UV resistance and abrasion resistance – long lasting durable bond
- Unaffected by alcohols, dilute acids and alkalis, soap and household detergents
- Excellent colour fastness; clear grades are non-yellowing
- Moisture curing system; cure rate is unaffected by low ambient temperatures

Applications

ALCOLIN SILICONE SEALANT is ideal for sealing, bonding and mending in cars, boats, caravans, and houses e.g. sealing around bathroom and kitchen fittings, baths, showers, sinks, toilets, oven door windows, window frames, boards, signs, insulating appliances, fixing leaking plumbing, etc.

Adhesion

ALCOLIN SILICONE SEALANT exhibits excellent primerless adhesion to many non-porous materials e.g. ceramics, glass, enamel, porcelain, coated wood, painted surfaces, canvas, stainless steel, aluminium, some rubbers and some plastics (epoxide, polyester, polyacrylate, polystyrene, formica, fiberglass, acrylics, polycarbonates and rigid PVC).

Limitations

- Not suitable for alkaline surfaces such as concrete, fibrous cement, asbestos, plaster and marble, as the product releases acetic acid during curing.
- Not suitable for some metals such as mild steel, lead, copper, tin, galvanized iron, brass or zinc as it may cause corrosion.
- May become discoloured in contact with some organic elastomers, which tend to bleed oil or solvents into the silicone, e.g. EPDM, APTK, Neoprene and Bituminous surfaces. It should not be used on the back of mirrors as it will de-silver the mirror backing, affecting the front appearance of the mirror. Not suitable for contact with marble, granite, quartzite, and similar natural stone as it may discolour the surfaces.
- Will not adhere to some plastics such as polyethylene, polypropylene and Teflon.

- **CANNOT** be over-painted.
- **NOT SUITABLE FOR FISH TANKS** (contains a fungicide).
- Do not apply sealant when relative humidity is below 10% - cure rate will be affected.

Safety instructions

When working with uncured ALCOLIN SILICONE SEALANT, it is advisable to wear gloves in order to avoid direct contact with the skin. During curing, acetic acid is released; these vapours should not be inhaled for long periods or in high concentrations. Consequently, work in a ventilated area.

If ALCOLIN SILICONE SEALANT comes into contact with skin or eyes, flush thoroughly and immediately with water. If irritation continues, seek medical attention.

Cured silicone rubber can be handled without any risk to health.

Keep ALCOLIN SILICONE SEALANT out of reach of children!

Refer to our Material Safety Data Sheet for further toxicological information and comprehensive handling instructions.

Surface preparation

- Surfaces coming into direct contact with ALCOLIN SILICONE SEALANT must be clean, dry, free from all loose materials, dust, dirt, oil, rust and any other contaminants.
- Non-porous substrates such as metals, glass and plastics should be degreased with a solvent. Plastics can be lightly abraded with emery paper. **On no account should any type of alcohol be used for surface cleaning – alcohols inhibit the cure of silicones.**
- Soaps or detergents used to clean the surface must be rinsed away thoroughly with clean water to ensure that all traces of the soaps are removed before sealing.
- Poor surface preparation may result in the delamination of the silicone.

Directions for use

- Ensure surfaces are prepared as above.
- Cut tip off cartridge and screw nozzle onto cartridge. Cut the tip of nozzle at an angle to achieve the desired bead size. Apply silicone with a caulking gun 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 (within 3 - 5 minutes) before skin formation occurs, by using a flat or rounded tool or even a finger, dipped in soapy water.
- Sealant will be touch dry within 1 hour and reaches full cure after approximately 24 hours.
- A pungent vinegar-like odour will be noted during application but will disappear as the sealant cures.
- If the area being sealed, needs to be painted, ensure the paint has dried COMPLETELY before sealing.

- The following formula is an approximate guideline in order to calculate yield for a standard 300ml cartridge : $L = \frac{300}{W \times D}$.

Where L = Length of sealant in meters per cartridge
W = Width of joint in mm
D = Depth of joint in mm

Cleaning

- Uncured silicone can easily be removed from hands or tools using a clean cloth soaked in solvent such as turpentine or paraffin. If removing uncured silicone from clothing, check fabric colour fastness before using the above mentioned solvents.
- Sealant will be touch dry within 1 hour and reaches full cure after approximately 24 hours.
- When fully cured, sealant can be removed by mechanical means, i.e. using a sharp knife or chemically, using Silicone Stripper.

Storage stability

ALCOLIN SILICONE SEALANT has a shelf life of at least 12 months if stored in a cool, dry place below 25°C in its original sealed moisture-tight container.

If the material is kept beyond the recommended shelf life, it is not necessarily un-usable; a check should be performed to observe whether the product is still workable, apply-able and uncured.

To maximize the shelf life of the opened tube, it is advisable to create an airtight environment. This can be achieved by removing the nozzle and wiping down the opening, placing a piece of plastic over it, screwing on the nozzle, and storing in a cool environment.

Product packaging

- 300ml Cartridge

Product data

i. Physical data – Uncured Silicone

Appearance		Homogenous non sagging paste in Clear, White, Black, Grey and Bronze
Tack free time	ASTM C-679-71	Approx. 10 - 15 minutes
Skin over time	BS 5889 Ap.A	Approx. 20 - 30 minutes
Curing time		Approx. 24 hours per 3-4mm
Slump	ISO 7390	0.00mm
Coverage - 280ml cartridge		11 metres (5mm x 5mm joint)
Packaging sizes		280ml cartridges
Shelf life		12 months when sealed and stored below 25°C

ii. Performance data – Cured Silicone

Service temperature range		Min.–50°C to Max. +150°C
Tensile strength	ISO 37	1.2 – 1.4 MPa
Modulus at 100% elongation	ISO 37	0.33 – 0.36 MPa
Movement accommodation factor		20%
Ultimate elongation	ISO 37	350 - 500%
Elastic recovery	ISO 7389	96%
Shore A hardness	ISO 868	14%

The above information is only offered, as a guide to the use of this product. Furthermore, users should satisfy themselves that it is suitable for their needs. Since we have no control over the conditions under which it is used, we cannot accept responsibility for problems caused by the use and/or application of this product.

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