



TECHNICAL DATA SHEET

CONTRACTORS SILICONE

Description

ALCOLIN CONTRACTORS SILICONE is a contractor's grade one-part acetoxy-curing silicone sealant that provides a permanent flexible watertight seal for general purpose sealing in and around the house. ALCOLIN CONTRACTORS SILICONE has a VOC of 50g/L, meeting the Green Building Council of South Africa 'African Green Star SA Office V1' specification of less than 250g/L.

Features & Benefits

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

Applications

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

Safety instructions

ALCOLIN CONTRACTORS SILICONE is non-toxic however, it is advisable to wear gloves in order to avoid direct skin contact. In the event of skin or eye contact, rinse thoroughly and immediately with water. Seek medical assistance if irritation or discomfort persists. Avoid breathing in vapours. Always work in a well-ventilated area. Keep out of reach of children! Cured silicone rubber can be handled without any health risk. Refer to our Safety Data Sheets for further toxicological information and comprehensive handling instructions.

Surface preparation

- Surfaces coming into direct contact with ALCOLIN CONTRACTORS SILICONE 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

1. Ensure surfaces are prepared as above.
2. 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.
3. 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.
4. 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.
5. Sealant will be touch dry within 1 hour and reaches full cure after approximately 24 hours.
6. A pungent vinegar-like odour will be noted during application but will disappear as the sealant cures.
7. If the area being sealed, needs to be painted, ensure the paint has dried COMPLETELY before sealing.
8. The following formula is an approximate guideline in order to calculate yield for a standard 280ml cartridge:

$$L = \frac{280}{W \times D}$$

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 a Silicone Stripper.

Storage stability

ALCOLIN CONTRACTORS SILICONE has a shelf life of at least 18 months if stored in a cool (below 25°C), dry place in its original moisture-tight container. If the material is kept beyond the recommended shelf life, it is not necessarily unusable, but a check should be performed to observe whether the product is still workable, applicable and uncured. To maximize the shelf life of the opened cartridge, we recommend that the nozzle be removed and a piece of plastic placed over the cartridge tip after which the nozzle must be screwed back on. A large screw inserted into the nozzle tip also helps.

Product packaging

- 260ml 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-679-91	Approx. 15 – 20 minutes
Skin over time	BS 5889 Ap.A	Approx. 25 – 35 minutes
Curing time	At 23°C & 55% RA	Approx. 24 hours per 2/3mm
Slump	ISO 7390	0.00mm
Coverage - 260ml cartridge		10 metres (5mm x 5mm joint)
Packaging sizes		260ml cartridges
Shelf life		18 months when sealed and stored below 25°C

ii. Performance data

Service temperature range		Min. -50°C to Max. +150°C
Tensile strength	ISO 37	1.2 MPa
Modulus at 100% elongation	ISO 37	0.35 Mpa
Elastic recovery	ISO 7389	90%
Ultimate elongation	ISO 37	400%
Shore A hardness	ISO 868	13%