



ALCOLIN EXPANSION JOINT SEALER



Description

ALCOLIN EXPANSION JOINT SEALER is a high performance neutral curing MS-polymer based adhesive and sealant in one. It is ideal for interior and exterior applications where a permanently elastic bond is required.

ALCOLIN EXPANSION JOINT SEALER provides several distinct advantages over traditional silicones. Unlike silicones, it is paintable and odourless. It provides excellent primerless adhesion to a much wider variety of substrates, including damp surfaces. Unlike traditional polyurethane sealants, ALCOLIN EXPANSION JOINT SEALER is isocyanate free

Features & Benefits

- Elastic – good movement accommodation (up to 25%) – suitable for expansion joints
- Remains flexible from -40°C to approximately 100°C
- Adheres to damp surfaces
- Excellent mechanical and chemical properties
- Gap filling and non-shrinking
- Easy to apply with caulking gun, from 5°C to 35°C

Application

- Sealing of expansion and movement joints in walls, floor and paving joints
- Sealing of pre-cast and partition units
- Sealing of air-conditioning and ventilation joints
- Sealing around swimming pools
- Sealing between building carpentry and masonry
- Sealing joints that must be painted over
- Sealing cracks in plaster
- Weather sealing between doors/window frames and plaster
- Sealing between building carpentry and masonry
- Permanently elastic
- Bonding of dissimilar substrates
- Sealing containers and refrigeration work

Adhesion

ALCOLIN EXPANSION JOINT SEALER provides excellent adhesion to concrete, plaster, brickwork, wood, glass, melamine, rigid PVC, polyester, polystyrene, fibreglass, polycarbonate, epoxy, ceramics, marble, slate, granite, stone, rubber, cork, stainless steel, anodized aluminium, ferrous metal, copper and painted surfaces and wood coatings

Chemical resistance

ALCOLIN EXPANSION JOINT SEALER is resistant to fresh water, seawater, limewater, sewage effluent, aliphatic solvents, dilute acids and caustic solutions. Temporarily resistant to fuels, mineral oils, grease, vegetable and animal fats and oils. Not resistant to organic acids, chlorinated hydrogens, alcohols, concentrated mineral acids, caustic solutions and aromatic solvents



Limitations

- ALCOLIN EXPANSION JOINT SEALER is not recommended for professional applications, only for DIY applications
- May not bond to certain plastics and rubbers. Test before use. Does not adhere to polyethylene, polypropylene, Teflon, plasticized PVC and bituminous surfaces
- Not suitable for underwater application
- Not suitable for expansion joints greater than 25mm

Safety instructions

Although ALCOLIN EXPANSION JOINT SEALER is non toxic, when working with the product it is advisable to wear gloves in order to avoid direct contact with the skin. If product comes in contact with skin or eyes, flush thoroughly and immediately with water. If irritation continues, seek medical attention

Keep ALCOLIN EXPANSION JOINT SEALER out of reach of children!

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

Surface preparation

The surface coming into direct contact with ALCOLIN EXPANSION JOINT SEALER must be clean and free of all loose materials, dust, dirt, oil, rust and any other contaminants

As a precaution, it must be remembered that poor surface preparation may result in the delamination of the sealant

The optimum temperature for substrate when applying sealant is between 15°C and 25°C

Gaps exceeding 5mm should be half-filled with backing material before application

Joint preparation

Use grinding equipment to remove paint and concrete, taking care that the joints do not become "V" shape. All loose dirt and concrete must be removed by brush or vacuuming. Remove any oil or grease with suitable solvents

Concrete and grout

New concrete and grouting must be allowed to cure for at least 3 weeks before sealing

Fixing panels

We recommend mechanical cleaning and oil-free air blasting in order to thoroughly clean the surface and remove dust and mud, and cleaning with solvent to remove grease and oils. For large and/or heavy panels where ALCOLIN EXPANSION JOINT SEALER will be subjected to major stresses, we recommend the use of a suitable primer

Joint design

ALCOLIN EXPANSION JOINT SEALER may be used for expansion joints as well as normal joints from 5 mm to 25 mm. Their width must be at least 5 times greater than the maximum expected movement. Sealing depth will be chosen depending on the width of the joint. For widths greater than 16mm, the depth must be equal to half the width. The following table (value in mm) should be followed:

Sealing width/depth ratio

WIDTH	5/6 mm	7/9 mm	10/12 mm	13/16 mm	20 mm
DEPTH	5 mm	6 mm	7 mm	8 mm	10 mm

It is necessary that a filler material or bond breaking tape is used in order to avoid adhesion of ALCOLIN EXPANSION JOINT SEALER to the bottom of the joint which would exercise unnecessary tension on the sealant. Regulation of its depth is then achieved as well as greater yields

The material to be used must be inert, mechanically stable, homogeneous, corrosion-resistant, and must not adhere to either the sealant or contiguous materials. Sondor "Polycord" is a suitable closed cell polyethylene foam-backing strip in various thicknesses to match the joint widths



Directions for use

- Ensure surfaces are prepared as above
- Cut tip off cartridge and screw the nozzle onto the cartridge. Cut the tip of nozzle at an angle to achieve the desired bead size. Apply 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 25 minutes) before skin formation occurs, by using a flat or rounded tool. One can also use a finger, dipped in soapy water
- Sealant dries to touch in 15 minutes and reaches full cure after approximately 24 hours. One must remember that the sealant cures by reaction with atmospheric moisture. At low temperatures, the moisture in the air is generally low, which may retard the cure speed
- ALCOLIN EXPANSION JOINT SEALER requires no protection from the weather. Nevertheless, it can be easily painted over with any acrylic paint so long as it is sufficiently elastic. The hardness and thickness of the paint may impair the flexibility of the sealant and result in cracking of the paint film

Fixing panels

Apply ALCOLIN EXPANSION JOINT SEALER to one of the surfaces to be joined in 5mm, parallel, short and non-continuous vertical strips that will allow air flow through the joint. Press the panel onto the surface. It is advisable to hold the panel with chocks or other system for at least 48 hours

Yield

The following formula is an approximate guideline to calculate foreseen yield for a standard cartridge of ALCOLIN MS37 1000 USES

$L = \frac{280}{W \times D}$	Where: L = Length of sealant in metres obtained per cartridge. W = Width of the joint in mm D = Depth of the joint in mm.
A joint of 5mm width and 5mm depth yields 11.2 meters per 280 ml cartridge	

Cleaning

- Uncured sealant can easily be removed from the hands or tools using a clean solvent soaked cloth, e.g. turpentine or paraffin. If removing uncured sealant from clothing, check fabric colorfastness before applying the above mentioned solvents
- When fully cured, sealant can be removed by mechanical means, i.e. with a sharp knife

Storage stability

ALCOLIN EXPANSION JOINT SEALER has a shelf life of at least 9 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 easily extruded and workable

To maximize the shelf life of the opened cartridge, 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, and finally screwing the nozzle back on. Store in a cool environment

Product packaging

280ml cartridge



Product data

i. Uncured

Test	Test method	
Appearance		Homogenous creamy paste
Slump resistance	NF P 85501	0mm
Tack free time	ASTM C-679-71	Approximately 10-15 minutes
Skin formation	BS 5889 AP.A	Approximately 25-50 minutes
Curing rate at 23°C and 55% RH		Approximately 24 hours per 2-3mm
Coverage – 280ml cartridge		Approx. 11 .2 meters (5mm x 5mm joint)
Flash point		430°C
Application temperature		5°C to 50°C
Shelf life		9 months when sealed & stored below 25°C

ii. Cured (4 weeks at 23°C and 55% RH)

Test	Test method	
Appearance		Similar to rubber
Shore A hardness	DIN 53505	40+-3
Elastic modulus 100%	DIN 53504	0.70 – 0.80 mPa
Tensile strength	DIN 53504	1.60 – 2.00 mPa
Elongation at break	DIN 53504	350 – 400%
Movement accommodation factor	ISO 11600	25%
Service temperature range		Approx. -40°C to +100°C
UV and weather resistance		Very good
Chemical resistance – water, soapy water and brine		Very good
Chemical resistance – inorganic diluted acids and alkalis		Very good
VOC Level		35g/L

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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