
PEKAY M672 AND M673 POLYURETHANE JOINT SEALANT

DESCRIPTION

Pekay polyurethane joint sealants are a versatile range of new generation urethane-based elastomeric jointing compounds. They possess excellent adhesion characteristics and are able to withstand large joint movements with the minimum stress on the adhesive bond. These products are based on block PU polymers so they are easy to work with, being non-sensitive to moisture during cure.

Grades supplied:

Pekay M672 self levelling (flow) grade for horizontal joints

Pekay M673 thixotropic (gun) grade non-slumping for vertical joints

FEATURES

- NOT SENSITIVE TO MOISTURE DURING CURE
- Easy to mix and apply
- Suitable for sewerage and water retaining structures in place of polysulfide sealants
- Up to 100% elongation with full recovery at 25°C
- Excellent oil, ozone and chemical resistance
- Suitable for use without priming on a wide variety of substrates
- May be used on trafficable surfaces
- The product is formulated to closely match the requirements of SABS 1077-1984, although it is not Mark-bearing
- Not based on MDI-isocyanate curing systems, so not water sensitive

APPLICATION INSTRUCTIONS

JOINT PREPARATION

▪ **Cleaning**

A hand-operated grinding disc or similar equipment should be used to remove paint, concrete and foam waterproofing strips from the joints.

Joints should be cleaned down to bare concrete on the sides to ensure good bonding. Care should be taken when grinding that joints do not become "V" shaped but rather maintain a uniform width.

Joints should be cut so that their depth is twice their width to allow sufficient space for the backing foam.

All loose dirt and concrete must be cleaned out of the joints with a soft brush.

▪ **Inserting the backing strip**

A closed cell polyethylene foam-backing strip is to be used in all joints. Suitable products are:

- Sondor “Jointex” – type EPX closed-cell cross-lined expanded polyethylene foam
- Strip & Gasket Industries “Flexifoam” – type EPEF 30kg / m³ density closed-cell cross-linked expanded polyethylene foam

Any other proprietary product that conforms to the above description will also be suitable.

The width of the backing strip should be equal to the width of the joints and the thickness of the strip should approximately equal the width.

The backing strip is to be inserted into the joints to a uniform depth. After the backing strip has been inserted the joint should have a depth equal to its width – (if the joints are greater than 15mm wide, the depth should be half the width).

▪ **Priming**

Priming is not usually necessary if the joint is sound, clean and free of loose particles. Should any doubt exist as to the suitability of the substrate, Pekay G315 polyurethane primer must be applied.

The product is a two-component system. Add the entire contents of part B into part A and stir thoroughly.

Apply to the sides of the joint with a soft bristle-brush. Allow to dry for a maximum of 3 hours before sealing. Joints left for longer than four hours must be re-primed.

▪ **Masking the joints**

In order to protect areas adjacent to the joints from becoming contaminated with sealant, a strip of masking tape should be carefully laid alongside the edge of the joint. This tape should be removed before the sealant has completely cured; i.e. within 24 hours of application.

SEALANT MIXING

Pekay M673 polyurethane sealant is supplied as a 2lt combined pack.

- Part A is held in a 2,5lt plug-lid can, and is covered by a plastic sheet
- Part B is held in a 100ml plastic bucket on top of the plastic sheet

Pekay M672 sealant is supplied as a 3kg combined pack where parts A and B are issued separately.

Part A and B are of different colours, usually white and black, although other combinations are available on request.

In this way, good mixing is ensured: the applicator mixes the ingredients together until all streaks have completely disappeared.

The entire contents of both cans must be mixed together, using a slow speed drill of sufficient power and a horse-shoe-shaped impeller. (See diagram Appendix A).

The can should be clamped or held firmly in position while the stirrer is moved around the perimeter.

Each can should be mixed until entirely uniform (approximately 5 – 10 minutes).

The sides of the can should be scraped with a putty knife to ensure even blending.

APPLICATION OF THE FLOW GRADE

A suitable vessel with a convenient spout, such as a can or old teapot should be selected. Pour the sealant evenly into the joint, taking great care not to waste product around the joint edges. Allow the sealant to fill the joint to within 1mm of the top.

APPLICATION OF THE GUN GRADE

Application of Pekay M673 should be by hand or pressure operated closed barrel guns. For maximum economy of operation, the barrel should be approximately 320mm long. The outlet nozzle should be 2 – 3mm smaller than the width of the joint.

The gun may be filled by pressing the base down on the opening of a plunger plate, in the way a standard grease gun is filled, or simply using a spatula.

The sealant is gunned into the centre of the joint, ensuring at all times complete contact between the sealant and the joint surfaces.

To further force the sealant into the joint and complete the finish, a round spatula of approximately the same width as the joint, wetted with soapy water, should be run along the joint, depressing it slightly and giving it a smooth, even finish.

CLEANING

All tools and equipment should be cleaned off immediately after use with Pekay C411 solvent.

Rags and empty tins should be thrown away to prevent contamination of fresh stock.

The following table and formulae serve as a guide for determining joint requirements.

Joint Dimension (mm)

	10 X 10	15 X 15	20 X 10	25 X 12
M672 – metres per kilo	6,9	3,0	3,5	2,3
M673 – metres per litre	9	4,0	4,5	3,0

Number of kilos required:

Width (mm) X depth (mm) X length (m)

690

Number of litres required:

Width (mm) X depth (mm) X length (m)

900

SPECIFICATIONS

BASE	: Blocked polyurethane polymer
NUMBER OF COMPONENTS	: 2
MIXING RATIO	: A + B : 100 + 6,5 w/w
COLOUR	: Grey, others on request
SOLIDS	: 99 ± 1% w/w
MASS PER LITRE	: 1,3kg
VISCOSITY	: M672 – thin syrup M673 – heavy paste
CURE TIME AT 25°C	: Tack free – 12 hours Full cure – 7 days
POT LIFE AT 25°C	: Maximum 2 hours
ELONGATION	: Up to 80% with full recovery
AGED HARDNESS	: 20 – 25 Shore A
FLASH POINT	: 200°C
CLEANUP / SOLVENT	: Pekay C411 or C401 solvent

GENERAL

APPLICATION TEMPERATURE LIMITS	: 5° to 50°C
SERVICE TEMPERATURE LIMITS	: -50° to +100°C
STORAGE TEMPERATURE LIMITS	: 5° to 50°C
STORAGE LIFE	: Part A: minimum 18 months : Part B: maximum 6 months
PACKAGING	: M672: 3kg in a 2,5lt can : M673: 2lt in a 2,5lt can
SHIPPING CLASSIFICATIONS	: Non flammable, non hazardous : Protect from freezing

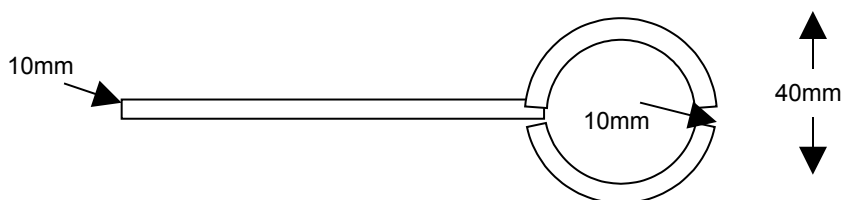
LIMITATIONS

1. Always stir well before use
2. Do not mix more material than can easily be applied within 2 hours
3. Not resistant to strong oxidizing agents; softens when immersed in brake fluid and aggressive solvents

READ SAFETY DATA SHEET BEFORE USE.

APPENDIX A

Refer: B. Sealant mixing



The information contained in this technical data sheet is to the best of our knowledge correct. NO GUARANTEE IS EXPRESSED OR IMPLIED. Users must satisfy themselves as to the efficacy of the product in their application.