

Epicon ARG

Rapid Setting Gap Filler and Sealant for Decks

Description

A two component cold applied flexible epoxy resin based grout designed for use as a moisture tolerant flexible repair system and sealant. Epicon ARG is a versatile high flow resin which can be used for the repair of cracks and joints or when blended with coarse aggregate for patch repairs. It is characterised by its rapid setting nature and ability to accept vehicular traffic after as little as 2 hours @ 20°C.

Advantages

- No primer required
- Cold-applied & moisture tolerant
- Excellent bond strength to steel, concrete & asphalt
- Resistant to road salts, fuel oil & waterproof
- Total joint movement 20% (± 10%)
- Suitable for same day trafficking

Applications

- Gap filling & joints in car parks & fuel station forecourts
- Factories, warehouses & shopping malls
- Runways, carriageways & rail crossings
- Platforms, bus stations, dock areas & tidal zones
- Patch repairs in concrete & asphalt car park decks

Technical information

* Note, if not decanted from the tin this will cure faster.

Polymer base	Epoxy
Working time	10 minutes @ 20°C
Yield	2.0 litres per 2.5 Kg
Cure time (aggregate free)	30 minutes @ 20°C
Trafficking time	2-3 hours @ 20°C
Density;	
Unfilled (resin only)	1200 kg/m ³
4kg aggregate blend	1700 kg/m ³
6kg aggregate blend	1900 kg/m ³

Surface Preparation

All surfaces should be clean, sound, visibly dry, free of oil, grease, dirt, dust, chemical contamination and all loose materials.

Joints should be cleaned by wire brushing or grinding. Joint sides must be parallel and straight. Masking Tape is recommended.

Priming

Priming is not normally required, but should priming be deemed necessary this can be achieved by using the mixed base and hardener resin and brushing into the surface.

Mixing

Great care and diligence is needed when mixing Epicon ARG.

For gap filling and joints:

The entire contents of the hardener should be added to the base container and thoroughly mixed for 3–4 minutes using a slow speed drill and gate type paddle, taking care not to entrain air.

Great care must be taken to prevent unmixed material remaining on the sides and base of the container.

The product is then ready for immediate use.

Bulking-out for patch repairs:

Mix the base and hardener components as above then transfer the product to a forced action or pan mixer drum. Whilst the drum is rotating, gradually add and blend with kiln dried aggregate;

4kg 6mm aggregate to 2.5kg Epicon ARG = self compacting mortar

6kg 6mm aggregate to 2.5kg Epicon ARG = easily compacted mortar

The blend is then ready for immediate application into the patch.

For further information on bulking-out, contact Nufins technical department, prior to use to discuss suitability.



Technical properties of Epicon ARG

Properties	Standard	Performance Requirement	Declared Value
Appearance			Black/Grey resin
Joint Width - minimum			5 mm
Working time			10 minutes
Hardening time			30-40 minutes
Viscosity			22300 cps
Density			1200 kg/m ³
Temperature for application			5°C to 35°C*
Shore 'A' hardness			47
Resistance to hydrolysis	EN 14187-5	Change in Shore A hardness <±50 %	+10 %
Tensile strength	BS 6319-7		4.6 MPa
Elastic recovery	EN ISO 7389		>25 %
Adhesion - concrete	EN 1542	≥1.5 MPa	≥2.0 MPa
Adhesion after freeze/thaw (50 cycles with salt)	EN 13687-1	≥1.5 MPa	≥1.5 MPa
Adhesion after thunder showers (30 cycles)	EN 13687-2	≥1.5 MPa	≥1.5 MPa
Adhesion after dry cycling (30 cycles)	EN 13687-4	≥1.5 MPa	≥1.5 MPa
Chemical resistance; Gasoline Diesel Aviation fuel	EN ISO 2812-1		No effect No effect No effect
Movement accommodation factor	BS 60936		20 %

Technical data shown are statistical results and do not correspond to guaranteed minima.

Tolerances are those described in appropriate performance standards.

All tests performed at 23°C, unless otherwise stated.

*Consult with the technical department when being used below 5°C.

1 N/mm² = 1 MPa

1 kN/mm² = 1 GPa

Application Instructions

For gap filling and joints:

Suitable for widths 6 - 40mm.

Mixed resin should be immediately transferred to a 1 litre plastic cartridge and loaded into a 1 litre skeleton gun. Work quickly to guide Epicon ARG into the gap or joint working along the length of the slot and continue until the resin is approximately 5mm below the running surface. Leave to settle and monitor the level, topping up immediately if required.

For patch repairs:

Carefully place the mixed Epicon ARG/aggregate into the defect or patch and evenly spread over the area. After allowing to settle top up immediately to level with the surrounding surface and tool with a steel float dampened with Nuwash to finish.

Cleaning

Clean all tools and equipment immediately and throughout the day with Nuwash.

Curing Time

Epicon ARG is designed as a cold curing system, giving rapid cure at temperatures down to 5°C. The product can be used at ambient temperatures down to 2°C.

Packaging

Epicon ARG is available in 2.5 kg & 5kg units (2 litre and 4.1 litre yields respectively).

1 litre Skeleton Guns & Cartridges must be ordered as required.

Nuwash is available in 5 & 20 litre drums.

Storage

The shelf life is 3-6 months depending upon storage conditions. For optimum storage conditions store unopened in dry, normal conditions and away from direct sunlight. Protect from frost.

Health and Safety

Product Safety Data Sheets (SDS) are available from Nufins. SDS sheets are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the latest information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product.

Limitations

For use below 5°C consult our technical department.

When using below 10°C, Epicon ARG must be stored overnight at 20°C to 25°C and kept warm up till time of use, in order to assist mixing and application procedures.

Maximum joint width 40mm.

Disclaimer

The information contained herein is to the best of our knowledge true and accurate and is given in good faith but without warranty. The user will be deemed to have satisfied themselves independently as to the suitability of our products for their own particular purpose. In no event shall Nufins be liable for consequential or incidental damages.

Users must always refer to the most recent issue of the Technical Datasheets, copies of which will be supplied on request.

Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Our technical contacts are available to provide further information and arrange demonstrations.