

Epicon ARG

Runway Repair System

Description

A two component cold applied flexible epoxy resin based grout designed for use as a moisture tolerant flexible repair system. 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 large area repairs.

Advantages

- No primer required.
- Excellent bond strength to steel, concrete and bitumen surfacing.
- Resistant to road salts and fuel oil.
- Hard wearing with in-built flexibility.
- Moisture tolerant.
- Rapid cure even at low ambient temperatures.

Applications

- Crack repairs.
- Floor joints.
- Large area repairs.

Technical information

Polymer base	Epoxy
Working time	10 Minutes @20°C
Yield	4.17 Litres per 5kg
Cure time (resin only)	30 Minutes @20°C*
Trafficking time	2-3 Hours @20°C
Density;	
Unfilled (resin only)	1200 kg/m ³
8kg Aggregate blend	1700 kg/m ³
12kg Aggregate blend	1900 kg/m ³

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

Surface Preparation

All surfaces should be clean, dry free from oil, grease, chemical contamination and all loose materials. Oil and grease should be removed using Desolve.

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

For crack and joint repairs:

The entire contents of the hardener tin should be added to the base tin and thoroughly mixed using a slow speed drill and suitable paddle taking care not to entrain air. The product is then ready for pouring directly into the crack or joint.

For large area repairs:

Mix the base and hardener components as above then transfer the product to a forced action or pan mixer and blend with kiln dried aggregate.

8kg 6mm aggregate = self compacting mortar.

12kg 6mm aggregate = easily compacted mortar.



Technical properties of Epicon ARG.

Properties	Standard	Performance Requirement	Declared Value
Appearance			Black/Grey Resin
Joint Width - Minimum Maximum			5mm 40mm
Working time			10 Minutes
Hardening Time			30-40 Minutes
Viscosity			22300 cps
Density			1200 kg/m ³
Temperature for application			2°C to 35°C*
Shore 'A' Hardness			47
Resistance to Hydrolysis	EN 14187-5	Change in Shore A hardness<±50%	52 (+10%)
Tensile Strength	BS6319-7		4.6 MPa
Elastic recovery	EN ISO 7389		>25%
Adhesion - concrete	EN1542	≥ 1.5 MPa	≥ 2.0 MPa
Adhesion after freeze/thaw (50 cycles with salt)	EN13687-1	≥ 1.5 MPa	≥ 1.5 MPa
Adhesion after thunder showers (30 cycles)	EN13687-2	≥ 1.5 MPa	≥ 1.5 MPa
Adhesion after dry cycling (30 cycles)	EN13687-4	≥ 1.5 MPa	≥ 1.5 MPa
Chemical resistance; Gasoline Diesel Aviation fuel De-icing chemicals	EN ISO 2812-1		No effect 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 at below 5°C.

1 N/mm² = 1 MPa

1 kN/mm² = 1 GPa

Application Instructions

For crack and joint repairs:

Pour the mixed Epicon ARG into the crack or joint working along the length of the repair and continue until the resin is approximately 5mm below the top surface. Leave to settle and then top up to the required level. If necessary tool the resin to give the desired finish.

For large area repairs:

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

Clean all tools and equipment after use with Nuwash.

Curing

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 units and 5 kg units, (2.0 litre and 4.1 litre yields respectively).

Storage

Shelf life is 12 months when stored correctly in dry conditions at normal ambient temperatures, in the original sealed containers. Store away from food stuffs and out of the reach of children.

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.

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.