

CI/SfB (4-) Yq

OCTOBER 2022 (SUPERSEDES AUGUST 2022) PRODUCT DATA SHEET

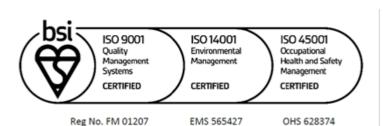
# **ARDEX EG 18 PLUS**

# Easy to Apply and Clean Epoxy Tile Grout and Adhesive



#### **Features**

- Combines the chemical resistance of epoxy grouts with the enhanced application properties of cement-based grouts
- Can be cleaned off up to 60 minutes after application
- Easier to use than traditional epoxy grouts with no special application tools required
- Resists chemical attack and is waterproof and abrasionresistant
- Hygienic and durable for a reduced maintenance schedule
- Suitable for internal and external wall and floor applications, including swimming pools
- Suitable for use with underfloor heating
- Suitable for joints 2-12mm wide
- Available in White, Grey, Silver Grey, Anthracite, and Bahama Beige



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## **ARDEX EG 18 PLUS**

### Easy to Apply and Clean Epoxy Tile Grout and Adhesive

#### DESCRIPTION

ARDEX EG 18 PLUS combines the performance of an epoxy based grout with the ease of application associated with cement based grouts.

ARDEX EG 18 PLUS has high chemical and abrasion resistance and, being impervious; it also produces hygienic joints that require minimal maintenance. Unlike traditional epoxy grouts, however, it is easy to apply and clean off, requiring no special tools and cleaning off up to 60 minutes after application.

ARDEX EG 18 PLUS grout is resistant to aqueous salt solutions, chlorine water, commercial cleaning agents, alkalis, as well as a wide range of dilute mineral acids. Please refer to the chemical resistance table overleaf for more detail. Full chemical resistance is achieved after 7 days at normal temperatures.

The BS EN 1388&classification for ARDEX EG 18 PLUS is RG for a "Reaction resin grout". The BS EN 12004 adhesive classification is R2 for a "Reaction resin adhesive".

#### USF

ARDEX EG 18 PLUS is particularly suitable for use in swimming pools, showers, bathrooms, shops, hospitals, hydrotherapy and spa baths, sports centres and other buildings where high standards of hygiene and cleanliness are

#### **PREPARATION**

Before grouting, ensure the tiles are firmly fixed and that the tile faces and joints are clean and free of dust, excess adhesive or standing water.

#### MIXING

Consult MSDS for required PPE before mixing. Empty the contents of both the resin and the hardener into the empty larger outer bucket. Thoroughly mix the two components together to obtain a homogeneous mixture.

Add all the filler and then continue to mix until a smooth, homogeneous mortar is produced. The use of a propeller-type stirrer in a slow speed drill is advantageous. Mix slowly and thoroughly to a uniform colour. Avoid entraining air by mixing at too high speed or by over-mixing. Note: Transfer some of the mixed mortar back into each of the resin and hardener pots to disperse any remaining materials left in these container (back mixing). Transfer this material back into the main mixing bucket then thoroughly mix in until a uniform mortar is produced. Mixed epoxy grout working time 20°C: approx. up to 60 minutes when applied to tile surface.

This is reduced at higher temperatures and extended at lower temperatures. Apply at temperatures above  $10^{\circ}\text{C}$  and below  $30^{\circ}\text{C}$ . At high temperatures, it is recommended that the mortar is spread out immediately after mixing as self-heating in the container will reduce the working time/pot life.

#### FIXING APPLICATION

The surface being adhered to must be dry, dimensionally stable, sound and free of dust, contamination and other barriers to adhesion. Suitable tiling surfaces include concrete, cement/ sand renders and screeds, Terrazzo and other building materials. Where doubt exists to the suitability of the background apply a test area to check adhesion.

NOTE: ARDEX EG 18 PLUS is suitable for fixing wall mosaics, generally no larger than 25mm x 25mm. ARDEX EG 18 PLUS White is recommended where glass/ translucent tiles or mosaics are being fixed, or where thin tiles or mosaics are to be grouted with white ARDEX EG 18 PLUS.

When fixing tiles, mosaics, etc. spread the ARDEX EG 18 PLUS over the surface with a trowel and comb with a suitable notched trowel to give a ribbed mortar bed.

Press the tiles into the ribbed adhesive layer and thoroughly bed in using the appropriate technique to ensure good contact throughout. Once bedded, the tiles can be adjusted up to 30 minutes after fixing; tiles can be grouted 12 hours after fixing at 20°C.

#### FIXING COVERAGE

A 4kg container of ARDEX EG 18 PLUS will yield approximately 2.66 litres of material, equivalent to approximately 2.66m² at 1mm bed thickness (for example using a 3mm x 3mm mosaic square notch trowel). Material requirement is approximately 1.5kg of material per m² per mm bed thickness. The actual coverage achieved in practice will depend on the back profile of the tiles, notched trowel and technique used to bed the tiles.

#### **GROUTING APPLICATION**

- Check potential staining risk or scratching by applying to an unused tile before proceeding, if required a protective sealer can be applied.
- 2. For glass, some natural stone, profile trims, absorbent textured or soft ceramic tiles which may be vulnerable to surface scratching, test in a small inconspicuous area to ensure compatibility, or consult the tile manufacturer/ distributor for further advice. See also BS 5385: Part 1 for further information.
- 3. Work in small areas using a Hard Rubber Grout Float. Completely fill tile joints with mixed grout and compact well, removing excess grout from tile surface as work proceeds. Just before cleaning off, apply a fine mist of clean water from a suitable spray bottle to the surface of the tiles to emulsify/soften the grout residues just prior to cleaning down.
- 4. Clean off within the working time (typically 15-60 minutes depending on site temperature) using a damp sponge and clean water. This time is affected by the ambient conditions, porosity of the tiles and the width of the joints. However, cleaning can commence as soon as the grout surface is firm enough to resist damage and excavation of the joint during the cleaning process. Cleaning must be completed by 60 minutes after grouting.
- 5. Using a clean, damp, sponge, remove emulsified epoxy/water residue, cleaning diagonally to grout lines. Clean the sponge and wash water frequently to avoid transferring residue back to the tile surface.
- 6. Clean any remaining light haze from the surface next day with a damp sponge or if required by using a EMULSIFYING PAD (WHITE) or Scotchbrite pad (see below). Tools should be cleaned before the mortar has hardened using a brush and water.

NOTE: Do not allow any surplus grout or haze to remain on the surface for more than 24 hours. All grouting should be completed in line with B5 5385. Protection (food preparation/ storage areas): Tiles/mosaics to be kept dry and not brought into service until the epoxy grout has cured and hardened, 7 days. Not recommended for grouting tiles with soft-glazed wall tiles or tiles with metal décor or lustre.

NOTE: As for all epoxy grouts, ARDEX EG 18 PLUS may yellow on exposure to sunlight, UV light or strong heat. Where strong exposure is anticipated, consider the use of ARDEX EG 18 PLUS GREY or ANTHRACITE. Spillages of, e.g. coffee and fruit juices, may stain the surface of the grout if not cleaned immediately.

Textured or profiled non-slip tiles may require the use of a Scotchbrite pad to emulsify the residues. For modern "sand-paper texture" non-slip tiles used in swimming pools and other wet areas, we recommend the manufacturer also be consulted for additional cleaning guidelines.

For contrasting colours (grouts/tiles) and textured tiles, a final clean using a

proprietary epoxy grout remover may be required to remove any traces of emulsified residues.

Where acid based cleaning products are to be used on the hardened grout, we recommend that the product is first tested on the wetted grout before application to ascertain the resistance of the colour/grout.

Thorough rinsing off is required to remove any residues of the acidic cleaner to prevent discolouration/damage to the grouted ioint.

#### **GROUT COVERAGE**

This will depend upon the tile size and joint width, and depth. The grout coverage figure for ARDEX EG 18 PLUS is 1.5.

Use the following to estimate the approximate grout requirements for square orrectangular tiles (all measurements in mm):

- 1. ADD length and breadth of tile together.
- 2. MULTIPLY result by joint width.
- 3. MULTIPLY result by joint depth.
- 4. MULTIPLY result by coverage figure (1.5 for ARDEX EG 18 PLUS).
- 5. DIVIDE result by length of tile.
- 6. DIVIDE result by breadth of tile.

The result is the material requirement in kg per m<sup>2</sup>.

#### Example:-

Tiles 150mm x 150mm x 5mm; joints of 5mm:-300 x 5 x 5 x 1.5  $\div$  150  $\div$  150 = 0.5kg/m<sup>2</sup>

- thus one 4kg unit of ARDEX EG 18 PLUS will grout up to 8.0m<sup>2</sup> of tiling

Note: These figures will differ when using other tile joint dimension. Highly textured tile surfaces may require 0.1–0.2kg/m<sup>2</sup> of extra grout.

Quick and easy grout coverage can be calculated using the grout calculator available online at: www.ardex.co.uk

#### PACKAGING

ARDEX EG 18 PLUS is supplied in an outer mixing bucket containing pre-gauged pots of resin and hardener and a bag of coloured filler.

#### STORAGE AND SHELF LIFE

 $Store in \, dry \, conditions.$ 

ARDEXEG 18 PLUS has a storage life of not less than 12 months in the original unopened containers.

#### **PRECAUTIONS**

Consult the MSDSs for the resin, hardener and filler before use. Dispose of liquid waste to licensed waste disposal sites in accordance with the requirements of the local Waste Disposal Authority. This covers waste-water that has been used for cleaning tools or tile surfaces. Any residues that remain in water should be disposed of as above to ensure that it is not able to contaminate drains, sewers and watercourses. Cured epoxy grout may be disposed of as non-hazardous waste.

# **ARDEX EG 18 PLUS**

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#### TECHNICAL DATA

In accordance with ARDEX quality standards.

Mixing ratio: specified by the

packaging 1.5kg/l

minutes

Fresh mortar weight: ca.
Working time (20°C):

e Lactic acid 10%

1.5kg/l Not resistant to: approximately 60 Acetone

Methyl alcohol Petrol

Acetic acid 5%

Short-term resistance to:

Open time (EN 1346): approximately 30 minutes

Adjustment time: approximately 30 minutes

Walkability (20°C):

After sufficient drying time, approximately 12 hours at room temperature

#### **TENSILE ADHESION STRENGTH**

After 28 days dry, wet: more than 1N/mm<sup>2</sup>

#### COMPRESSIVE STRENGTH

After 28 days: >45N/mm<sup>2</sup>

#### **FLEXURAL STRENGTH**

After 28 days: >20N/mm<sup>2</sup>

### RESISTANCE TO CHEMICALS IN ACCORDANCEWITH ARDEX QUALITY STANDARDS

#### Resistant to:

Hydrochloric acid 37%

Nitric acid 10%

Sulphuric acid 50%

Cillit Bang

Flash Bleach Cleaner

Sodium hypochlorite >10% active chlorine

Hydrogen peroxide 25%

Lubricant oil

Olive oil

Deionised water

Tap water Diesel

Phosphoric acid 10%

Citric acid 10%

Tartaric acid 10%

Lactic acid 5%

Acetic acid 2.5% Ethylene glycol

Note that some discolouration may occur with mineral

acids

**NOTE:** For the latest technical or health and safety information on this product, consult the current technical or health and safety datasheet online at

www.ardex.co.uk

**NOTE:** The information supplied in our literature or given by our employees is based upon extensive experience and, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we, therefore, reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations.

#### **TECHNICAL ADVICE HELPLINE**

01440 714939 ARDEX online www.ardex.co.uk