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PRODUCT DATA SHEET

# ARDEX WA

## White or Grey Epoxide Adhesive and Grout

### Features

Ideal for use in wet areas, including swimming pools

Use as a grout for joint widths 2-12mm - easy to apply and clean off

For internal and external applications

Use where high standards of hygiene, chemical resistance and cleanliness are required

Solvent free

Waterproof and frost resistant

Suitable for walls and floors

Available in 4kg grey or white and 2kg white only



ARDEX WA: Application

ARDEX WA: Excess Removal

ARDEX WA: Damping

ARDEX WA: Emulsifying

ARDEX WA: Sponging

ARDEX WA: Clean Finish



Reg No. FM 01207

EMS 565427

OHS 628374

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# ARDEX WA

## White or Grey Epoxide Adhesive and Grout

### GROUT COVERAGE

This will depend upon the tile size, joint width and depth and the Grout Coverage Figure, which for ARDEX WA is 1.5.

Use the following to estimate the approximate grout requirements for square or rectangular tiles:-

Stage (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 (i.e. for WA, 1.5).
  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>.

### Summary

Material required is:-

$$\frac{(\text{length} + \text{breadth}) \times \text{width} \times \text{depth}}{\text{length} \times \text{breadth}} \times 1.5 = \text{kg/m}^2$$

Quick and easy grout coverage can be calculated using the cement and epoxy-based grout calculator at ARDEX online: [www.ardex.co.uk/calculator.asp](http://www.ardex.co.uk/calculator.asp)

### Example

Tiles 150mm x 150mm x 5mm; joints of 5mm:-

$$\frac{(150 + 150) \times 5 \times 5}{150 \times 150} \times 1.5 = 0.5\text{kg/m}^2$$

- thus one 4kg unit of ARDEX WA will grout up to 8.0m<sup>2</sup> of tiling. These figures will differ when using other tile joint dimensions:-

Joint Width	Tile Size	Approx. amount of ARDEX WA Mortar
3mm	200 x 100 x 6mm	0.4kg/m <sup>2</sup>
2mm	150 x 150 x 5mm	0.2kg/m <sup>2</sup>
2mm	100 x 100 x 5mm	0.3kg/m <sup>2</sup>
2mm	50 x 50 x 5mm	0.6kg/m <sup>2</sup>

### DESCRIPTION

The BS EN 12004 R2 T designation for ARDEX WA classifies the adhesive as an 'improved reaction resin adhesive with additional characteristics and reduced slip'. ARDEX WA is a solvent free, epoxide resin-based thin bed adhesive and grouting compound, for use where chemical resistance is required or where cement-based grouts are inappropriate. ARDEX WA is suitable for fixing and grouting all types of ceramic tiles, glass and ceramic mosaics in internal and external situations. When fully cured, the ARDEX WA mortar provides a decorative, waterproof, weather and frost resistant joint from 1-2mm wide that is chemically resistant.

### MIXING

Thoroughly mix the Hardener A into the Primary Paste W until a uniform mortar is produced. The use of a propeller type stirrer in a slow speed drill is advantageous. The ARDEX WA mortar is ready for immediate use and has a working time of approximately 85 minutes at 20°C. This is reduced at higher temperatures and extended at lower temperatures. 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. Apply at temperatures above 10°C.

### FIXING TECHNIQUE

The surface being adhered to must be dry, sound, free of dust, contamination and other barrier materials. Suitable surfaces include concrete, cement/sand renders and screeds, rigidly fixed plywood, terrazzo and other building materials. In doubtful cases apply a test area to check adhesion.

**NOTE:** ARDEX WA epoxide mortar is suitable for fixing wall and floor tiles or mosaics. White ARDEX WA is recommended where glass/translucent tiles or mosaics are being fixed or where thin tiles or mosaics are to be grouted with white ARDEX WA. Where chemical spillage may occur ARDEX WA grey is recommended.

When fixing tiles, mosaics, etc. the ARDEX WA mortar is spread over the surface with a trowel and combed with a notched trowel to give a ribbed mortar bed (use a 5mm square toothed and notched pattern for tiles and a 3mm square toothed and notched pattern for mosaics). The tiles are pressed into the ribbed mortar and thoroughly bedded in using the appropriate technique to ensure good contact throughout. Once bedded, the tiles can be adjusted within the working time of the mortar. Tiles can be grouted after 12 hours at 20°C.

### GROUTING

The use of correct tools is essential when applying ARDEX epoxide grouts, please see the ARDEX Tool Catalogue and ARDEX Instruction Leaflet No.10 for more details. Using a suitable squeegee, work the mortar into the dry joints, ensuring they are completely filled. The use of a good rubber backed trowel/squeegee removes virtually all excess mortar from the surface of the tiles. Any remaining material can be cleaned off within the working time using a Scotchbrite® pad with a little water and applying gentle pressure, working in circular movements to emulsify the

residues on the tile face. Carefully remove the resulting ARDEX WA slurry with a squeezed out sponge, wiping the tile surface once before rinsing again in clean water. Any final traces may be removed later the same working day using a further application of the Scotchbrite® pad and sponging off with clean water. Use the white Scotchbrite® pad for ARDEX WA white and the blue Scotchbrite® pad for ARDEX WA grey. **NOTE:** DO NOT LEAVE ANY TRACES OF SURPLUS MATERIALS ON THE FACE OF THE TILES AS CLEANING OFF AT A LATER DATE WILL BE IMPOSSIBLE.

**NOTE:** Certain types of tile may be prone to surface discoloration or scratching when using this grout, e.g. some made of natural stone and some absorbent, textured or soft glazed ceramic tiles. Consult BS 5385: Part 1: 1995 for further information or consult the tile manufacturer/distributor for advice. If in doubt carry out a trial application. Information on natural stone products may be found in the ARDEX natural stone tiling guide. Tools should be cleaned before the mortar has hardened using a brush and water.

### USE

ARDEX WA is especially suitable for use in swimming pools, showers, bathrooms, shops, abattoirs, dairies, hospitals, hydrotherapy and spa baths, sports centres and other specialised buildings where high standards of hygiene and cleanliness are required. The hardened ARDEX WA mortar can withstand full loads after 2 days curing at normal temperatures and after 7 days it is resistant to aqueous salt solutions, chlorine water, commercial cleaning agents, alkalies as well as a wide range of dilute mineral acids. The hardened ARDEX WA mortar is resistant to normal domestic cleaning agents, swimming pool detergents, etc. Spillages such as coffee, tea, fruit juices, e.g. blackcurrant, etc., may stain the surface of the grout if not cleaned off immediately. ARDEX WA has not been tested in accordance with Commission directive 1895/2005 and as such should not be used in direct contact with food, e.g. on food preparation surfaces. ARDEX WA is however suitable for floors, walls and other surfaces in areas where food is prepared and a hygienic easily cleaned surface is required.

### FIXING COVERAGE

A 4kg unit of ARDEX WA is sufficient for approximately 1.4m<sup>2</sup> of tiles or 2.2m<sup>2</sup> of medium or small mosaics.

### PACKAGING

4kg units of ARDEX WA are supplied in pre-gauged containers, the ARDEX Primary Paste W is in the larger container with room to mix in the ARDEX Hardener A from the smaller container. ARDEX WA is also available in 2kg 'white only'.

### STORAGE AND SHELF LIFE

Store in dry conditions. ARDEX WA has a storage life of not less than 12 months in the original unopened containers.

### TECHNICAL DATA

Mixing ratio: Primary Paste W: Hardener A = 3:1  
by weight  
Working time: approximately 85 mins at 20°C  
Walk on time: approximately 12 hours

### Compressive Strength

After 1 day 60.0 N/mm<sup>2</sup>  
After 7 days 70.0 N/mm<sup>2</sup>  
After 28 days 70.0 N/mm<sup>2</sup>

### Tensile Bending Strength

After 1 day 35.0 N/mm<sup>2</sup>  
After 7 days 40.0 N/mm<sup>2</sup>  
After 28 days 40.0 N/mm<sup>2</sup>

### Properties tested to BS EN 12004

### Tensile Adhesive Strength

After 28 days greater than 2.5 N/mm<sup>2</sup>

### Slump-Resistance

Slip - less than 0.5mm

### PRECAUTIONS

The hardener which contains trientine, 2,2-iminodiethylamine and the epoxy resin which contains bisphenol A/F-epichlorhydrin, oxirane can be irritating to the eyes and skin and may cause sensitisation by contact. They are considered harmful in contact with the skin and if swallowed. During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin during mixing and application. Avoid contact with the hands by wearing protective gloves and by using, if necessary, a suitable barrier cream.

In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eye/ face protection as necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

For more information, consult the relevant health and safety data sheet.

**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.