

# ARDEX R 76 PU

## **Self-Levelling Polyurethane Resin**

Solvent free

High mechanical and chemical resistance

Can be mixed with sand

**Excellent adhesion** 

Easy to clean

Available in a range of RAL colours

Internal or external use

Meets EN 13813-2002

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# ARDEX R 76 PU

### **Self-Levelling Polyurethane Resin**

#### **DESCRIPTION**

ARDEX R 76 PU is a solvent free, two-component polyurethane resin for creating flooring with high chemical and abrasion resistance. When mixed with 0.3-0.4mm quartz sand, ARDEX R 76 PU can be applied as a highly even, self-levelling coating.

After curing, ARDEX R 76 PU is resistant to the passage of water, chemicals, frost, and weathering.

#### **USES**

- Floors requiring high abrasive resistance
- Industrial flooring e.g. laboratories, garages, food preparation areas, pharmaceutical and chemical sectors
- Storage areas and motorised goods tanks
- Highly trafficable areas e.g. garages

#### SURFACE PREPARATION

Ensure that the substrate is hard, dry, solid and free of laitance, grease, dust or other loose particles such as paint, release agents, limescale, mortar, plaster, adhesive residues, etc., which may impair adhesion. Remove all traces of varnish, waxes, fats, oils and similar contaminants prior to mechanical preparation.

Prepare substrate with specialist machinery; grinding, milling or blasting machine depending on the state of the substrate. Vacuum the substrate.

Properly treat and seal all joints or gaps in the concrete substrate where differential movement is expected (for example expansion joints). Substrate tensile strength must be greater than 15 MPa.

#### **PRIMING**

Prime the substrate with ARDEX R 4 E or ARDEX R 5 E. To ensure binding efficiency and absence of bubbles, more than one priming layer may be required especially on highly porous substrates, and on substrates with areas of different absorption.

The second layer should be applied as soon as the first is sufficiently cured. Do not allow the primer to dry for any longer than indicated in its technical sheet, otherwise it will need to be sanded and reprimed.

#### **MIXING**

Stir the individual components of ARDEX R 76 PU before mixing. Thoroughly mix the two components with a mixer at low speed for a minimum of 3 minutes.

Part of the mixture can be reintroduced into the hardener container to gather remaining residues in the container. The mixture which has been reintroduced into the hardener container can be returned to the mixing container and stirred for a further 30 seconds. This mixing process ensures the product's consistency and that any residual resin remaining in the containers reacts.

After the two components have been mixed, use immediately. 1kg of ARDEX R 76 PU remains workable for 25 minutes at a temperature between 18°C and 20°C.

#### **IMPORTANT**

Towards the end of the mixture's useful life and due to its high level of reactivity, the mixture will heat up, resulting in a sharp decline in pot life. The heat increases in proportion to the amount of resin remaining in the container.

In these cases (high temperature) do not touch the drum. In case of fumes, place the lid without closing it and using the handle, place somewhere cool or outdoors.

#### **APPLICATION**

Once components A and B are mixed, add 300-400g of 0.3-0.4mm quartz sand per kg of product. Higher proportions of aggregate will compromise elasticity.

Pour the material over the primed substrate and distribute with a notched trowel to control thickness. Treat immediately with a spiked roller to allow entrapped air to escape, until all bubbles have been removed.

For proper levelling, a minimum thickness of 2mm is required. Do not add solvent or thinner at any stage.

#### **LIMITATIONS**

Do not use ARDEX R 76 PU where ambient or substrate temperatures are less than 10°C or less than 3°C above dew point. Do not use where ambient or substrate temperatures exceed 30°C or where ambient humidity exceeds 85%. If pot life is exceeded, the product should be disposed of.

All ARDEX products are manufactured subject to rigorous quality controls and procedures; however, if strict colour consistency is required, it is recommended to use products from the same batch.

#### **COVERAGE**

When mixed in 1:0.4 ratio with aggregate: 1.7kg/mm/m<sup>2</sup>

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#### **CLEAN UP**

Clean tools and equipment immediately after use with an applicable solvent. Hardened product will need to be removed mechanically.

Any spillage from any of the products must be removed immediately with sand, vermiculite or other inert material and collected in a suitable container for proper handling and treatment. Residues from spillage and empty containers must be dealt with in accordance with local regulations. See product safety sheet for further information.

#### **STORAGE**

ARDEX R 76 PU can be stored for up to 12 months in its original unopened packaging. Store in a dry place between 5°C and 30°C. Keep away from frost, direct sunlight and sources of heat.

#### **COLOUR**

ARDEX R 76 PU can be tinted to a range of standard RAL colours.

#### **PACKAGING**

ARDEX R 76 PU is available in kits of 25kg, containing two parts (Part A - 19.2kg & 5.78kg).

#### **PRECAUTIONS**

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Obtain special instructions before use. Wear protective gloves, protective clothing, eye and face protection. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, call a POISON CENTRE. IF exposed or concerned, get medical attention. Call a POISON CENTRE or doctor if you feel unwell. Dispose of contents/container to hazardous or special waste collection point, in accordance with local regulation. Contains isocyanates. May produce an allergic reaction.

Additional information is in the Safety Data Sheet at www.ardex.co.nz

#### **TECHNICAL DATA**

Characteristics	Result
Density	Approx. 1.4kg/L
Working time @ 20°C	25 minutes
Initial cure @ 20°C	7 hours
Full cure @ 20°C	7 days
Compressive strength (UNE EN 196-1)	45MPa (mortar 1:0.3 with 0.4mm sand)
Mechanical strength achieved	24 hours
Chemical strength achieved	7 days

Toll Free Technical Services: 1800 224 070 (Australia) 0800 227 339 (New Zealand)

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#### **COLOUR CHART**



<sup>\*</sup>Indication of colour only.

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