

CI/SfB (43) Yq

MARCH 2021 (SUPERSEDES JULY 2020) PRODUCT DATA SHEET

# **ARDEX AF 145**

## **Pressure Sensitive Vinyl Adhesive**

#### **Features**

 Ready to receive floorcoverings in as little as 20 minutes



- Can receive vinyl sheet up to 80 minutes after airing
- Excellent early and long term adhesive strength
- Can also be used as a wet bond adhesive
- High temperature resistance, suitable for use over underfloor heating systems
- Solvent free
- Covers up to 48m<sup>2</sup>



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# **ARDEX AF 145**

### **Pressure Sensitive Vinyl Adhesive**

#### DESCRIPTION

ARDEX AF 145 is a water-based, solvent free, low odour, pressure sensitive and wet bond acrylic emulsion-based floorcovering adhesive. With a reduced airing, and long open time, ARDEX AF 145 offers excellent application properties and produces a high bond strength with permanent high tack. It is protected from biodegradation and has excellent resistance to plasticiser migration.

ARDEX AF 145 meets the requirement guidelines for the EMICODE licence 'EC1 PLUS', achieving the lowest possible emission limits.

#### USE

ARDEX AF 145 is ideal for installing all types of vinyl floorcoverings, and can be used with all ARDEX Latex and Water-Based Levelling and Smoothing Compounds in both commercial and domestic locations.

#### PRIMING

Priming is not required, however, on highly absorbent surfaces it can be advantageous to prime with ARDEX P 51 Priming and Bonding Agent diluted 1:3 with cold, clean water. This will maintain the working time and ensure maximum coverage of the adhesive.

#### SUBSTRATE PREPARATION

The subfloor must contain an effective damp proof membrane and be dry, with an equilibrium relative humidity of 75% or below. Where an effective damp proof membrane is absent, or the relative humidity of the subfloor is above 75% RH, consult the ARDEX Moisture Control brochure or contact ARDEX Technical Services for the correct product selection.

The subfloor must be hard, clean, free from barrier materials, sound and smooth in accordance with the relevant clauses of BS 8203 and BS 8204.

Any dust should be removed using suitable vacuum equipment, prior to applying ARDEX AF 145, as it can affect both the coverage and performance of the adhesive.

Uneven subfloors should be levelled with the appropriate ARDEX Latex or Water-Based Levelling and Smoothing Compound e.g. ARDITEX NA or ARDEX K 39.

ARDEX ARDURAPID A 45 Rapid Drying and Hardening Internal Repair Mortar can be used for repairs to the subfloor/stairs etc., up to 50mm thick, in accordance with the product data sheet.

Joints, nail holes and imperfections in plywood, or minor surface damage to existing levelling and smoothing compounds i.e. footprints or trowel marks, may be pre-smoothed and levelled prior to the application of ARDEX AF 145, using ARDEX FEATHER FINISH in accordance with the product data sheet.

Fabricated underlays such as flooring grade plywood, (SP101) should be installed where required over existing timber bases. Wood-based fabricated underlays should be suitable for the floorcovering and be at the equilibrium moisture content they will have in service at the time they are covered.

#### MIXING

ARDEX AF 145 is ready for use, but for optimum performance the adhesive should be thoroughly mixed to ensure the even dispersion of polymers before application.

#### **APPLICATION**

The installation area and subfloor should be kept at the recommended temperature as specified by the floorcovering manufacturer and the relevant clauses of BS 8203. These temperatures need to be maintained 48 hours prior to installation, during installation, and 48 hours after installation.

ARDEX AF 145 should be applied evenly to the suitably prepared substrate using the appropriate serrated trowel, held approximately at a 60 degree angle to the subfloor, to maximise coverage and avoid forming pools of adhesive.

Depending on the type of installation, the following advice should be observed.

#### PRESSURE SENSITIVE - DRY BOND

When used as a pressure sensitive/dry bond adhesive, ARDEX AF 145 should be applied to the subfloor and left to dry to a full tack, at least 20-40 minutes, depending on subfloor absorbency and ambient conditions.

For optimum performance, place the floorcovering into the adhesive within 30 minutes for LVT and 80 minutes for sheet vinyl, taking care to ensure correct alignment, as repositioning can be difficult. Roll the floorcovering using a 68kg roller and/or use a smoothing tool. Roll from side to side first, then end to end, to ensure full overall contact with the adhesive. Remove any air pockets with a cork board or rubbing tool before rolling.

Where there is a delay between applying the adhesive and the installation of the floorcovering, any contamination, e.g. by other trades, must be prevented from affecting the applied ARDEX AF 145.

#### WET BOND

Floorcoverings can be applied directly into the wet adhesive on absorbent backgrounds after the airing time, between 5-20 minutes, depending on ambient conditions.

When used as a wet bond adhesive, only apply sufficient adhesive that can be covered within the working time, up to 45 minutes on an absorbent subfloor. Periodically check that the adhesive has transferred to the rear of the floorcovering.

Remove any air pockets with a cork board or rubbing tool whilst the adhesive is still wet and roll the flooring with a 68kg roller as above.

Some vinyl floorcoverings may benefit from further rolling/smoothing. Heat welding should only commence once the adhesive has dried sufficiently. Do not allow the floor to be wet cleaned immediately after the floorcovering has been installed. Allow significant time for the adhesive bond to develop before wet cleaning commences, typically 48 hours at 20°C.

When applying adhesive onto the substrate, ensure that any adhesive which is surplus to requirements, and has been moved across the subfloor, is not placed back into the container. It should be placed into an alternative container for safe, easy disposal. This will avoid possible contamination issues.

#### UNDERFLOOR HEATING

Underfloor heating systems should be commissioned in accordance with the heating manufacturer's instructions; if comment cannot be found then the guidance given in BS 8203 and BS 8204 should be followed.

Thermal cycling of the subfloor will require raising the temperature of the substrate slowly, usually 5°C a day, to full operating temperature, held for a defined period, and slowly brought back down, usually 5°C a day, so that any shrinkage that is likely to take place occurs before the floorcovering is installed.

If moisture tests are required to verify the relative humidity of the substrate, the underfloor heating system should be switched off for 48 hours prior to testing.

If moisture testing is not required, or after the tests are completed, the heating system should be stabilised to room temperature, but not below  $15^{\circ}\text{C}$ , before installing the floorcovering.

The floorcovering should be allowed to acclimatise to the substrate temperature before installation with ARDEX AF 145.

# **ARDEX AF 145**

### **Pressure Sensitive Vinyl Adhesive**

After installation allow at least 48 hours of constant temperature for the adhesive to properly cure, before slowly increasing the temperature up to the normal operating temperature of the area. Do not subject the floor to static or dynamic loads, loaded trolleys, etc., or move fixtures, furniture, etc., onto the flooring until the adhesive has fully set, typically 48 hours at 20°C.

#### HIGH TEMPERATURE

ARDEX AF 145 is suitable for use over underfloor heating systems and is classified as high temperature resistant. The surface floor temperature must not exceed 30°C. Consult the floorcovering manufacturer for detailed guidance. For areas subjected to prolonged or extreme solar gain, such as southerly facing aspects, consider the use of ARDEX AF 2575 PLUS or ARDEX AF 2525 Heavy Duty Adhesives.

#### **CLEANING**

Remove spills or seepage through joints with a cloth moistened with water before the adhesive dries. Aggressive cleaning agents should only be used with the permission of the floorcovering manufacturer.

#### **PACKAGING**

ARDEX AF 145 is packed in plastic tubs 12kg & 6kg net weight.

#### **COVERAGE**

See table below. The actual coverage achieved in practice is affected by application technique, as well as the texture and absorbency of the subfloor.

#### STORAGE

ARDEX AF 145 has a shelf life of not less than 12 months if stored in good conditions, between 5°C and 30°C, in the original unopened container.

#### **PRECAUTIONS**

ARDEX AF 145 is non-hazardous in normal usage, however, good hygiene practices should be followed. Avoid contact with skin; wash off with soap and water before drying takes place. In case of contact with eyes, rinse carefully and thoroughly with water and seek medical advice. In case of ingestion seek medical assistance. Consult the relevant Health & Safety Data Sheets for further information.

For the latest technical or health and safety information on this product, consult the current product or health and safety data sheet online at: www.ardex.co.uk

### WORDING AND TERMINOLOGY - PRESSURE SENSITIVE

#### Airing Time

The time the adhesive must be left open before applying the floorcovering. Between 20-40 minutes\*

#### Working Time

The time in which the adhesive can receive the floorcovering. Up to 30 minutes for LVT, and 80 minutes for sheet vinyl, after the initial airing time.

#### Open Time

The combination of airing and working time. Up to 100 minutes.

Flooring Type	Trowel Size	Coverage
CV Flooring	A1	Up to 48m²
Vinyl Sheet/LVT/ CV	A2	Up to 40m²

#### WET BOND

#### Airing Time

The time the adhesive must be left open before applying the floorcovering. Between 5-20 minutes\*.

#### Working Time

The time in which the adhesive can receive the floorcovering, after the initial airing time. Up to 45 minutes\*.

#### Open Time

The combination of airing and working time. Up to 50 minutes.

\*depending on the absorbency of the subfloor and ambient conditions.

The guidance from the floorcovering manufacturer should always be followed if different from the information contained in this Technical 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.

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
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