

ARDEX Butynol®

Butyl Rubber Waterproofing Membrane

CodeMark Certified

Compliant to AS4654.1

Compliant to AS/NZ4020 - Potable Water Certified

Excellent resistance to atmospheric agents, ageing from heat, sunlight and ozone

Excellent resistance to geothermal gas including hydrogen sulphide and methane



ARDEX Australia Pty Ltd

20 Powers Road Seven Hills NSW 2147 1300 788 780 technicalservices@ardexaustralia.com www.ardexaustralia.com

ARDEX New Zealand Ltd

15 Alfred Street Onehunga, Auckland 1061 0800 227 339 info@ardexnz.com www.ardex.co.nz

ARDEX Butynol®

Butyl Rubber Waterproofing Membrane

PRODUCT DESCRIPTION

ARDEX Butynol® is a synthetic butyl rubber waterproofing membrane with properties which resist ageing from heat, sunlight and ozone. It has excellent gas impermeability and toughness and remains flexible at low temperatures and is suitable in all climatic zones.

USES

ARDEX Butynol® is generally used as a single layer waterproofing membrane in both horizontal or vertical applications for waterproofing UV exposed decks, roofs and gutters.

ARDEX Butynol® can be installed in environments which include under floor slabs, behind masonry walls, the lining of substrates of in situ or precast concrete; retaining walls, lift shafts, tunnels, reservoirs, and planter boxes.

SUBSTRATES

Concrete, plywood, insulation board, orientated strandboard, CFC sheet, timber, galvanised metal, zincalume. For further substrate types please contact ARDEX Technical Services (technicalservices@ardexaustralia.com). New concrete must be cured for a minimum of 28 days.

NOTE: The use of LOSP (Light Organic Solvent Preservative) treated plywood must NOT be used under ARDEX Butynol® in any circumstances.

SURFACE PREPARATION

By way of mechanical methods and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, and any other contaminants prior to membrane installation. Prepare surface to be sound, clean, dry, and free from loose or other materials which may cause potential adhesion issues or damage the membrane.

PRIMING

ARDEX WA 98 Adhesive is a ready to use solvent-based external contact adhesive for bonding ARDEX Butynol® membranes.

With a brush or roller apply ARDEX WA 98 Adhesive to both the sheet underside and the substrate at a rate of 4m² - 8m²/litre, and allow approximately the same drying time. Drying times will vary depending on substrate temperatures and ambient air conditions. Once the applied ARDEX WA 98 Adhesive becomes tacky to touch then it is ready for bedding. The ARDEX WA 98 Adhesive can be re-applied if the drying time elapses.

To create optimum adhesion, apply a neat primer coat of ARDEX WA 98 Adhesive to the prepared substrate and allow to totally dry. Apply another neat coat of ARDEX WA 98 Adhesive to the primed substrate and underside of sheet, then bring together once tacky.

Shake and stir the unopened ARDEX WA 98 Adhesive drum to thoroughly mix contents before use. Ensure not to apply ARDEX WA 98 Adhesive over an area that will later be spliced or seamed to another sheet or flashing. ARDEX WA 98 Adhesive for external use only.

DAMP OR GREEN SUBSTRATE

When masonry or concrete substrate moisture content is measured at greater than 80% relative humidity (ASTM F2170) or exceeds 15g/m²/24hrs (ASTM F1869) when tested in accordance with AS1884 or AS3740, ARDEX WPM 300 (HydrEpoxy) shall be the nominated primer prior to ARDEX WA 98 Adhesive.

Apply two coats of ARDEX WPM 300 (HydrEpoxy) at a rate of 3m²/litre (per coat) and allow to dry for a minimum of 24 hours. Drying times will vary depending on substrate temperatures and ambient air conditions. Once the ARDEX WPM 300 (HydrEpoxy) has cured, apply a neat primer coat of ARDEX WA 98 Adhesive and allow to totally dry. Apply another neat coat of ARDEX WA 98 Adhesive to the primed substrate and to the sheet underside, then bring together once tacky.

NOTE: If the ARDEX WPM 300 (HydrEpoxy) is not allowed to fully cure, the application of ARDEX WA 98 Adhesive can damage the uncured ARDEX WPM 300 (HydrEpoxy).

INSTALLATION

The installation of ARDEX Butynol® should be carried out by an approved ARDEX Applicator.

Before applying the Butynol®, it shall be unrolled for twenty minutes to relieve stresses induced by manufacture and storage. The Butynol® sheet shall be set out in the exact position in which it will be finally required and while it is held in place, it shall be folded back lengthwise to expose half the underside. To the now exposed underside and the area of roof also left exposed, apply an even coat of ARDEX WA 98 Adhesive. When the adhesive has become touch dry, work the sheet back into its original position avoiding wrinkles and the inclusion of air bubbles. Repeat the process with the other half of the sheet and when completed, roll the whole sheet with hand press rollers or the like. All turn ups and downs shall be neatly formed and cut to a straight line if required.

ARDEX Butynol® shall not be laid under tension in any circumstance.

Please refer to the ARDEX Butynol® Installation guide for more installation details.

BONDING OF LAPS

When applying the next sheet, it shall be lapped over the first sheet by 50mm. When the whole area has been covered or as work progresses, the applicator must seal all laps. Overlaps shall be sealed using the ARDEX Seam Tape & ARDEX WPM 299 Seam Primer system.

Please refer to the ARDEX Butynol® Installation guide for more installation details.

ARDEX Butynol®

Butyl Rubber Waterproofing Membrane

INSTALLATION OF CERAMIC TILES

Please refer to ARDEX Technical Bulletin - TB077 for more installation details. Tile installation must conform to the requirements of the Australian Standard AS3958.

The installation of ceramic tiles is recommended for ARDEX Black Butynol® only. ARDEX Dove Grey Butynol® is not recommended as an undertile membrane.

All exposed surfaces of the ARDEX Butynol® should be thoroughly solvent cleaned using ARDEX WA 98 Solvent or equivalent to remove all traces of surface contaminants including residual rolling oils from the manufacturing process. Allow to dry before proceeding.

Lay the tiles using ARDEX Optima adhesive applied to the membrane surface using a 12mm notched trowel to achieve a dry bed thickness of not less than 2.5mm - 3mm. Place the tiles in position and work into the adhesive to ensure a 100% coverage to the reverse side of the tiles. Only spread the adhesive to an area of approximately one (1) square metre at a time to ensure that the tiles can be placed before the adhesive forms a surface skin which will inhibit the bond strength.

Allow the ARDEX Optima adhesive to cure for at least 24 hours before proceeding with the next stage. Low absorbency tiles can extend the cure time.

PACKAGING

ARDEX Butynol® (Black 1.0mm) - 1.4m wide x 17.86m long ARDEX Butynol® (Black 1.5mm) - 1.4m wide x 17.86m long ARDEX Butynol® (Grey 1.5mm) - 1.4m wide x 17.86m long

STORAGE

ARDEX Butynol® has an indefinite shelf life when stored in good conditions, between 5°C and 30°C. Rolls must be stored horizontally, out of direct sunlight, away from sources of puncture and physical damage, away from ignition sources and open flame.

LIMITATIONS

The application of ARDEX Butynol® must be carried out by an ARDEX Approved Applicator. ARDEX Butynol® waterproofing membrane is only suitable for light maintenance traffic environments. It is the responsibility of the main building contractor to ensure all sub-trades likely to be working in the vicinity of the ARDEX Butynol® membrane are aware that a waterproofing membrane has been installed and all care must be taken to protect the membrane from damage.

Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

TECHNICAL DATA

CHARACTERISTICS	TEST METHOD	VALUE
Specific Gravity	ASTM D297	1.20 ± 0.05
Hardness IRHD	ASTM D1415	65 ± 5
Tensile Strength	ASTM D412	8.3 MPa min
Modulus at 300% elongation	ASTM D412	4.15 MPa min
Elongation at break	ASTM D412	>500%
Heat Ageing	7 days at 115°C	Pass
Tensile Retention	ASTM D412	70% min
Elongation Retention	ASTM D412	70% min
Tear Strength	ASTM D624	26kN/m
Ozone Resistance	ASTM D1149 (7 days at 40°C in 50pphm ozone)	No visible cracks
Water Absorption by mass by volume	ASTM D471	1.65% 0.72%
Water Permeability Vapour Flow Resistance Vapour Flow Rate	ASTM E96-92 (MNs/g) (g/m²d)	12414 0.013

SAFETY DATA

Avoid contact with skin and eyes; in case of contact with the eyes, wash out immediately with fresh running water. If irritation continues, seek medical attention. Wear protective gloves, clothing, face and eye protection. This product is combustible, decomposes on heating and produces toxic fumes. When handling the product do not eat, drink or smoke. Avoid inhaling dust/fume/ gas/mist/vapours/spray. If fumes or combustion products are inhaled remove from contaminated area. Ensure adequate ventilation during application. Check with your local Council regarding the disposal of contents. Call the Poisons Information Centre on 131 126 (AUS) and 0800 764 766 (NZ) or call a doctor if you feel unwell. Additional information is in the Safety Data Sheet (SDS) at www.ardexaustralia.com



Butyl Rubber Waterproofing Membrane

GUARANTEE

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 20 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070; Email: technicalservices@ardexaustralia. com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure".

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standards. Our instructions and recommendations are only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

© ARDEX Australia Pty Ltd 2020.

All aforementioned products are the trade marks of ARDEX Australia Pty Ltd, its licensors and affiliates. This datasheet was issued in May 2022 and is valid for 3 years, in some instances a newer version may be published. Always refer to www.ardexaustralia.com for the latest technical data from ARDEX Australia Pty Ltd.