

Selleys Aquadhere Exterior Wood Glue Product Guide

Canonical:

<https://directory.selleys.com.au/adhesives/wood-glue/selleys-aquadhere-exterior-wood-glue-product-guide/>

Details:

AI Summary

Product: Selleys Aquadhere Exterior Wood Glue **Brand:** Selleys **Category:** Exterior Woodworking Adhesive **Primary Use:** Water-based polymer emulsion adhesive for bonding timber assemblies in outdoor and high-humidity environments where bonds must withstand cyclic wetting, UV exposure, and temperature variation.

Quick Facts - **Best For:** Woodworkers and joiners bonding timber for pergolas, outdoor furniture, decking components, covered patios, and window or door joinery with weather exposure - **Key Benefit:** Delivers a durable, moisture-resistant bond through aluminium chloride hexahydrate crosslinking that resists re-dissolution when wetted, without hazardous solvents or VOC emissions - **Form Factor:** Viscous white emulsion; ready-to-use with no mixing required - **Application Method:** Apply by brush, spreader, or direct bead to clean dry timber; clamp until cured

Common Questions This Guide Answers 1. Is Aquadhere Exterior safe to use indoors without special ventilation? → Yes — it is non-hazardous under Australian GHS 7, releases only water vapour during cure, and natural ventilation is sufficient for typical applications 2. How long does it take to fully cure and when can clamps be removed? → Lightly loaded joints can be unclamped after several hours; structural joints require 24 hours minimum clamping; full cure takes 7 days before maximum load or weather exposure 3. What happens if the adhesive freezes or overheats in storage? → Freezing causes irreversible emulsion separation rendering the product unusable; elevated temperatures accelerate crosslinking, increasing viscosity until the material becomes unworkable

What Selleys Aquadhere Exterior Wood Glue Is

Selleys Aquadhere Exterior is a water-based woodworking adhesive built for exterior applications where bonded timber assemblies face real weather exposure (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Interior wood glues break down under moisture. This formulation holds up through cyclic wetting, UV exposure, and temperature swings typical of outdoor environments. The product comes ready-to-use in four container sizes — 250 mL, 500 mL, 1 L, and 4 L — so both hobbyist woodworkers and professional joiners can pick the right volume for the job (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf).

This adhesive belongs on timber that lives outdoors or in high-humidity environments: covered patios, pergolas, outdoor furniture, decking components, and window or door joinery with weather exposure. The exterior classification means the glue's polymer structure is engineered to resist hydrolysis and hold cohesive strength through repeated moisture cycling. When you need it to last, this is the product.

Chemistry and formulation

The adhesive is built around a polymer emulsion system with aluminium chloride hexahydrate as a functional component at 1–10% by weight (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf).

LLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf)). This aluminium salt acts as a crosslinking catalyst, accelerating the formation of covalent bonds between polymer chains as the emulsion dries. That crosslinking transforms the initially flexible polymer film into a three-dimensional network that resists re-dissolution when wetted — the core requirement for exterior-grade adhesive performance.

The water-based carrier means no volatile organic solvents. During application and cure, only water vapour is released. That removes the flammable vapour hazards and strong odours that come with solvent-based contact adhesives or polyurethane formulations. The material is not classified as hazardous under Safe Work Australia GHS 7 criteria, and carries no Poison Schedule designation (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). That non-hazardous classification reflects the absence of regulated hazardous substances above threshold concentrations, though the aluminium salt component still calls for standard industrial hygiene practices during handling.

The product is classified as a combustible material (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). The high water content prevents ignition under normal conditions, but dried polymer residue will burn if exposed to sufficient heat. This combustibility rating shapes storage requirements and emergency response procedures without restricting typical workshop use.

Physical properties and handling characteristics

Aquadhere Exterior is a viscous white emulsion. The consistency allows application by brush, spreader, or direct bead from the container, depending on joint geometry and required coverage. It flows at application viscosity without thinning, and excess material cleans up from tools and skin with water before the adhesive sets.

The material creates slip when spilled on smooth surfaces (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Clean up any dropped adhesive immediately — particularly on concrete workshop floors or sealed timber surfaces where the liquid film removes friction. That cleanup matters beyond safety too: spilled adhesive that dries on adjacent surfaces forms a tough film that requires mechanical removal.

Temperature drives both application performance and storage stability. Store the product in a cool, dry, well-ventilated location away from direct sunlight and heat sources (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Freezing disrupts the emulsion structure, causing permanent separation of the polymer and water phases that renders the adhesive unusable. High storage temperatures accelerate the slow crosslinking reactions that occur even in sealed containers, gradually increasing viscosity and eventually causing gelation that blocks normal application.

Application methods and joint preparation

Surface preparation begins with clean, dry timber substrates free from oils, waxes, or previous finishes that block adhesive wetting. Freshly machined or sanded timber gives you the ideal bonding surface. Weathered or contaminated surfaces need mechanical preparation to expose clean wood.

Apply adhesive to one or both mating surfaces depending on timber porosity and joint design. Open-grained hardwoods or end-grain joints perform best with double-sided application to ensure adequate adhesive penetration into wood cellular structure. Edge-grain joints in softwoods or medium-density species typically need application to one surface only. Spread the adhesive evenly for complete coverage without excessive squeeze-out — thick glue lines reduce ultimate bond strength.

Assembly must happen while the adhesive remains wet and tacky. Water-based emulsions begin forming a surface skin as water evaporates, reducing the adhesive's ability to wet and penetrate the second substrate. Position components accurately during initial assembly. The slip characteristic of wet adhesive allows minor adjustments immediately after bringing surfaces together.

Clamping pressure does three things: it maintains component alignment during cure, ensures intimate contact between adhesive and wood surfaces, and forces excess adhesive from the joint. Apply enough pressure to produce a thin visible squeeze-out bead along the joint line — that confirms complete glue-line coverage. Excessive clamping force starves the joint of adhesive and creates a weak bond. For most applications, finger-tight clamps on cabinet joints or moderate bar clamp pressure on edge-glued panels delivers the right force.

Cure profile and strength development

The adhesive cures through a multi-stage process that starts when water evaporates from the applied film. Initial tack develops within minutes as water concentration drops and polymer particles begin coalescing. This early stage provides the handling strength that allows clamp removal, but it represents only a fraction of ultimate bond performance.

Full strength development requires continued moisture loss and completion of the crosslinking reactions catalysed by aluminium chloride hexahydrate (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). This process extends over days, shaped by ambient temperature, relative humidity, glue-line thickness, and wood species permeability. Dense tropical hardwoods with closed grain structure retain moisture longer than porous softwoods, which extends cure times.

Minimum clamp time varies with joint stress and service conditions. Lightly loaded joints can be unclamped after several hours when the adhesive has developed enough green strength to handle stresses. Structural joints need to stay clamped for a minimum of 24 hours, with full cure occurring over 7 days before subjecting assemblies to maximum design loads or weather exposure.

Temperature has a significant effect on cure rate. Cool conditions below 10°C slow water evaporation and chemical crosslinking, potentially extending full cure to two weeks or more. Warm shop temperatures of 20–25°C optimise cure kinetics. Avoid artificially heating clamped assemblies — rapid surface drying can trap moisture in the glue line, creating internal stresses that undermine bond integrity.

Safety protocols and personal protection

Even with a non-hazardous classification under Australian GHS criteria (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf), standard industrial hygiene practices apply during handling and application. Wear safety shoes, overalls, gloves, and safety glasses (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). This protection prevents direct skin and eye contact, which may cause irritation in sensitive individuals even when the material lacks formal hazard classifications.

Choose gloves that balance chemical resistance with the manual dexterity needed for precise adhesive application. Nitrile rubber gloves provide suitable protection for intermittent contact, though users must make final assessments based on glove construction and specific work conditions (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Disposable nitrile examination gloves work well for light-duty applications and allow frequent changes when adhesive contaminates outer surfaces. Reusable industrial nitrile gloves provide extended protection for production environments with continuous exposure.

If skin contact occurs despite protective measures, remove contaminated clothing immediately and flush affected skin and hair with running water (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Seek medical attention if swelling, redness, blistering, or persistent irritation develops (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). The aluminium chloride component can cause irritation in prolonged contact situations, particularly if adhesive dries on skin and concentrates the salt.

Eye protection prevents splash exposure during application, especially when working overhead or dispensing from squeeze bottles. If eye contact occurs, wash immediately with water and continue irrigation while seeking medical advice (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Seek medical consultation for all eye contamination incidents regardless of symptom severity — corneal damage assessment requires professional evaluation.

Inhalation hazards are minimal under normal workshop ventilation conditions. Natural ventilation provides adequate air exchange for typical applications (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). If respiratory irritation occurs, move the affected person from the area and provide fresh air (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Production environments with continuous adhesive use or heated curing systems may need enhanced ventilation to manage accumulated water vapour.

Always wash hands thoroughly before smoking, eating, drinking, or using toilet facilities (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). This prevents incidental ingestion of adhesive residue. If ingestion occurs, rinse the mouth with water and give water to drink, but do not induce vomiting (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Seek medical advice, and provide the SDS or product container to inform treatment decisions (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf).

Storage requirements and container management

Store containers in a cool, dry, well-ventilated location away from direct sunlight and heat sources (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Keep storage areas separate from foodstuffs and incompatible materials (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). This separation prevents contamination and reduces risks if a container releases material.

Keep containers standing upright with closures secured (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Upright storage prevents leakage from closures and keeps labels legible. Regular leak inspections identify container deterioration before significant material loss occurs (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Address damaged containers immediately by transferring contents to sound containers with proper labelling.

Avoid temperature extremes in storage. Freezing temperatures disrupt the emulsion, causing irreversible phase separation visible as watery supernatant over curdled polymer solids. Elevated temperatures accelerate crosslinking reactions in sealed containers, gradually increasing viscosity until the material becomes unworkable paste. Seasonal temperature cycling in uninsulated storage areas can produce both outcomes over annual cycles.

Partially used containers need extra attention. Air exposure starts surface skinning as water evaporates from the emulsion surface. Remove any formed skin before use rather than mixing it into the bulk adhesive — partially cured material contains aggregated polymer particles that create weak spots in bond lines. Keep air exposure to a minimum by selecting container sizes matched to project consumption rates, and transfer small quantities from large containers rather than opening bulk supplies repeatedly.

Emergency response and spill management

For small spills involving minor quantities suited to hand cleanup, wear protective equipment to prevent skin and eye contact (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Wipe up material with absorbent cloths or paper towels, collecting

contaminated absorbents in sealed, properly labelled containers for disposal (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Clean residual adhesive from surfaces with water while the material remains wet — dried adhesive requires mechanical removal.

Large spills exceeding hand-cleanup capacity demand a more systematic response. Clear the area of unprotected personnel immediately (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). The slip hazard on smooth surfaces creates serious injury risk until material is contained (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Response personnel must wear complete protective equipment including safety shoes, overalls, gloves, and safety glasses (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf).

Work upwind of spilled material or increase ventilation to prevent vapour accumulation in low areas (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Contain the spill to prevent flow into drains and waterways by constructing dikes from absorbent materials such as soil, sand, or commercial spill pads (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Absorb the bulk liquid, then collect contaminated absorbent in sealed, labelled drums for disposal (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). If sewers, waterways, or agricultural areas have been contaminated, notify local emergency services immediately (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf).

The product is not classified as Dangerous Goods under Australian or New Zealand transport regulations (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf), and carries no Hazchem code or Initial Emergency Response Guide designation (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). That non-regulated status simplifies transport and storage but does not remove the need for proper spill response procedures.

Fire safety considerations

Aquadhere Exterior is classified as a combustible material, but its high water content prevents ignition under normal handling conditions (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Fire risk is primarily a storage concern where containers face external fire sources. If the adhesive becomes involved in a fire, use water fog, fine water spray, alcohol-resistant foam, standard foam, dry chemical powder, or carbon dioxide as extinguishing agents (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf).

Burning or thermal decomposition of the polymer components may produce toxic fumes (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Firefighters responding to incidents involving this material must wear self-contained breathing apparatus and suitable protective clothing if exposure to vapours or combustion products is possible (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Decomposition products from polymer combustion typically include carbon monoxide, carbon dioxide, and various hydrocarbon fragments, all of which present inhalation hazards.

Storage area fire protection must account for the combustible classification. Maintain clear separation from ignition sources including welding operations, grinding equipment, and electrical installations that could produce sparks. Store away from oxidising materials or other substances that promote combustion. Fire-rated construction in storage areas adds protection in facilities holding multiple combustible materials.

Quality control and performance verification

Assess adhesive condition through visual inspection and application testing. Fresh, properly stored material appears as a uniform white emulsion without phase separation, lumps, or surface skin. Discard material showing yellowing, foul odours, excessive thickening, or separated liquids — these are clear signs of degradation that will undermine bond performance.

Periodic bond strength verification using scrap materials confirms adhesive effectiveness and correct application technique. Create test joints using the same timber species, joint configuration, and clamping procedures planned for production work. After full cure, subject test joints to destructive loading. Strong bonds produce wood fibre tearing rather than adhesive layer separation. Adhesive layer separation points to inadequate surface preparation, insufficient clamping pressure, premature clamp removal, or degraded adhesive.

For production environments, keep application records noting adhesive batch numbers, application dates, and ambient conditions. This documentation supports quality investigations if bond performance issues arise in service and helps establish shelf-life management protocols specific to your storage conditions.

Regulatory status and product codes

Selleys markets Aquadhere Exterior under multiple product codes corresponding to container sizes: 100013 (250 mL), 100014 (500 mL), 100016 (1 L), and 100015 (4 L) (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Each size carries distinct barcodes for retail scanning and inventory management (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Reference these codes when ordering supplies or contacting technical support to ensure accurate product identification.

The manufacturer, operating under ABN 67 000 049 427, maintains technical support through telephone 1300 555 205 (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). Emergency assistance is available 24 hours through dedicated hotlines: 1800 220 770 in Australia and 0800 220 770 in New Zealand (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf). In poisoning incidents, contact the Poisons Information Centre at 131 126 in Australia or 0800 764 766 in New Zealand (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf).

Professional application considerations

Commercial woodworkers and joiners selecting exterior adhesives weigh performance requirements, application efficiency, and regulatory compliance. Aquadhere Exterior's water-based chemistry removes the workplace exposure controls required for isocyanate-based polyurethane adhesives or formaldehyde-releasing urea systems. The non-hazardous classification under Australian GHS criteria simplifies safety documentation and reduces regulatory reporting obligations (SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf).

Production efficiency comes from matching adhesive properties to workflow requirements. The ready-to-use viscosity means immediate application with no mixing or conditioning steps, unlike one-component polyurethane or two-part epoxy systems that demand preparation time before you can get to work. The water-based cure mechanism does require clamp time planning, as fixtures remain occupied longer than with fast-cure reactive adhesives. Shops with limited clamping capacity may need to stagger production schedules or invest in additional fixtures to maintain throughput.

Quality assurance programmes in joinery facilities should establish moisture content specifications for timber substrates. Wood moisture above 15% introduces free water into bond lines, diluting the adhesive and extending cure times unpredictably. Conversely, extremely dry timber below 8% moisture content can pull water from the adhesive too quickly, preventing adequate penetration. Keep substrate moisture content between 8–12% for the best bonding results with water-based adhesives.

With over 80 years of proven performance behind it, Selleys Aquadhere Exterior gives both professionals and DIYers confidence to tackle outdoor timber projects knowing the bond will hold.

References

- Source PDF: SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf (canonical)

Frequently Asked Questions

What is Selleys Aquadhere Exterior: A water-based exterior woodworking adhesive

Is Aquadhere Exterior suitable for outdoor use: Yes

Is Aquadhere Exterior suitable for indoor use: Yes, especially high-humidity environments

What type of adhesive chemistry does it use: Polymer emulsion system

What is the crosslinking agent in the formula: Aluminium chloride hexahydrate

What percentage of aluminium chloride hexahydrate is in the formula: 1–10% by weight

Does it contain solvents: No, it is water-based

Does it release volatile organic compounds during cure: No

What does the water-based carrier release during cure: Water vapour only

Is Aquadhere Exterior classified as hazardous under Australian GHS: No

Does it have a Poison Schedule designation: No

Is it classified as a combustible material: Yes

Can it ignite under normal handling conditions: No, high water content prevents ignition

What makes dried adhesive residue a fire risk: It will burn if exposed to sufficient heat

What container sizes are available: 250 mL, 500 mL, 1 L, and 4 L

What is the product code for the 250 mL size: 100013

What is the product code for the 500 mL size: 100014

What is the product code for the 1 L size: 100016

What is the product code for the 4 L size: 100015

What colour is the adhesive: White

What is the physical form of the adhesive: Viscous emulsion

Can it be applied by brush: Yes

Can it be applied by spreader: Yes

Can it be applied directly from the container: Yes

How do you clean up wet adhesive from tools: With water

Does spilled adhesive create a slip hazard: Yes, on smooth surfaces

What surfaces are most at risk from adhesive spills: Concrete floors and sealed timber surfaces

What happens to dried spilled adhesive: It forms a tough film requiring mechanical removal

Should adhesive be applied to one or both surfaces: Depends on timber porosity and joint design

When should double-sided application be used: For open-grained hardwoods or end-grain joints

When is single-sided application sufficient: Edge-grain joints in softwoods or medium-density species

What surface condition is ideal for bonding: Clean, dry, freshly machined or sanded timber

Can adhesive be applied to oily or waxed surfaces: No, these block adhesive wetting

Must assembly happen while adhesive is wet: Yes

Can minor adjustments be made after surfaces are joined: Yes, immediately after assembly

What does correct clamping pressure produce: A thin visible squeeze-out bead along the joint line

Does excessive clamping pressure improve bond strength: No, it starves the joint and weakens the bond

What is the minimum clamp time for lightly loaded joints: Several hours

What is the minimum clamp time for structural joints: 24 hours

How long until full cure is achieved: 7 days

Does temperature affect cure rate: Yes, significantly

What is the optimal shop temperature for curing: 20–25°C

What happens to cure time below 10°C: Extends full cure to two weeks or more

Should clamped assemblies be artificially heated to speed cure: No

Why should artificial heating be avoided during cure: Rapid surface drying traps moisture in the glue line

What happens if the adhesive freezes: Permanent emulsion separation, rendering it unusable

What happens to adhesive stored at high temperatures: Viscosity increases, eventually causing gelation

How should containers be stored: Upright with closures secured

Where should the adhesive be stored: Cool, dry, well-ventilated location

Should it be stored near foodstuffs: No

Should it be stored near direct sunlight: No

What PPE is recommended for handling: Safety shoes, overalls, gloves, and safety glasses

What glove material is recommended: Nitrile rubber

Are disposable nitrile gloves suitable for light-duty use: Yes

What should you do if skin contact occurs: Flush with running water immediately

Should contaminated clothing be removed after skin contact: Yes, immediately

When should you seek medical attention after skin contact: If swelling, redness, blistering, or irritation develops

What should you do if eye contact occurs: Wash immediately with water and seek medical advice

Should all eye contamination incidents receive professional evaluation: Yes

Are inhalation hazards significant under normal conditions: No

Is natural ventilation sufficient for typical applications: Yes

What should you do if respiratory irritation occurs: Move to fresh air

Should hands be washed before eating or smoking: Yes

What should you do if adhesive is ingested: Rinse mouth, give water to drink

Should vomiting be induced after ingestion: No

What emergency number handles poisoning in Australia: 131 126

What emergency number handles poisoning in New Zealand: 0800 764 766

What is the 24-hour Australian emergency hotline: 1800 220 770

What is the 24-hour New Zealand emergency hotline: 0800 220 770

What is the Selleys technical support phone number: 1300 555 205

What extinguishing agents are suitable for fires involving this product: Water fog, foam, dry chemical, or carbon dioxide

Do firefighters need breathing apparatus when tackling fires involving this product: Yes

What toxic hazard exists during combustion: Toxic fumes from polymer decomposition

What combustion by-products may be produced: Carbon monoxide, carbon dioxide, and hydrocarbon fragments

Is Aquadhere Exterior classified as Dangerous Goods for transport: No

Does it carry a Hazchem code: No

How should small spills be cleaned up: Wipe with absorbent cloths, collect in sealed labelled containers

What is the first step for large spills: Clear the area of unprotected personnel

How should spills near drains be managed: Contain with dikes of soil, sand, or spill pads

Who should be notified if waterways are contaminated: Local emergency services

What indicates fresh, usable adhesive: Uniform white emulsion without lumps or separation

What signs indicate degraded adhesive: Yellowing, foul odour, excessive thickening, or phase separation

What does a strong bond produce in destructive testing: Wood fibre tearing, not adhesive layer separation

What causes adhesive layer failure in destructive testing: Poor prep, insufficient pressure, or degraded adhesive

What is the ideal timber moisture content for bonding: 8–12%

What happens if timber moisture exceeds 15%: Adhesive dilutes and cure time extends unpredictably

What happens if timber is extremely dry below 8% moisture: Water is pulled from adhesive too quickly

Does the product require mixing before use: No, it is ready-to-use

Is it suitable for pergola construction: Yes

Is it suitable for outdoor furniture: Yes

Is it suitable for window and door joinery: Yes, where weather exposure exists

Is it suitable for decking components: Yes

Is it suitable for covered patios: Yes

What is the manufacturer's ABN: 67 000 049 427

How long has Aquadhere Exterior been proven in the market: Over 80 years

Label Facts Summary

> **Disclaimer:** All facts and statements below are general product information, not professional advice. Consult relevant experts for specific guidance.

Verified label facts

Product identity - Product name: Selleys Aquadhere Exterior - Manufacturer ABN: 67 000 049 427 - Source documentation: SELLEYS_AQUADHERE_EXTERIOR-AUS_GHS.pdf

Product codes and container sizes - 250 mL — Product code: 100013 - 500 mL — Product code: 100014 - 1 L — Product code: 100016 - 4 L — Product code: 100015

Formulation - Adhesive type: Water-based polymer emulsion - Physical form: Viscous white emulsion - Crosslinking agent: Aluminium chloride hexahydrate at 1–10% by weight - Solvent content: None (water-based carrier only) - VOC emissions during cure: None; releases water vapour only

Regulatory and hazard classification - Hazardous substance classification (Safe Work Australia GHS 7): Not classified as hazardous - Poison Schedule designation: None - Combustibility classification: Classified as a combustible material - Dangerous Goods classification (Australian/New Zealand transport): Not classified - Hazchem code: None - Initial Emergency Response Guide designation: None

Recommended personal protective equipment - Safety shoes, overalls, gloves, and safety glasses - Glove material: Nitrile rubber (suitable for intermittent contact per available information)

First aid — skin contact - Remove contaminated clothing immediately - Flush affected skin and hair with running water - Seek medical attention if swelling, redness, blistering, or persistent irritation develops

First aid — eye contact - Wash immediately with water - Continue irrigation while seeking medical advice - Seek medical consultation for all eye contamination incidents

First aid — inhalation - Move affected person from area and provide fresh air

First aid — ingestion - Rinse mouth with water; give water to drink - Do not induce vomiting - Seek medical advice; provide SDS or product container to inform treatment

Ventilation requirements - Natural ventilation is sufficient for typical applications

Storage requirements - Store in a cool, dry, well-ventilated location - Keep away from direct sunlight and heat sources - Keep away from foodstuffs and incompatible materials - Store containers upright

with closures secured - Inspect regularly for leaks

****Fire response**** - Suitable extinguishing agents: Water fog, fine water spray, alcohol-resistant foam, standard foam, dry chemical powder, carbon dioxide - Firefighters must wear self-contained breathing apparatus and suitable protective clothing if exposed to vapours or combustion products - Burning or thermal decomposition may produce toxic fumes

****Spill response — small spills**** - Wear full PPE - Wipe up with absorbent cloths or paper towels - Collect contaminated absorbents in sealed, properly labelled containers for disposal

****Spill response — large spills**** - Clear area of unprotected personnel immediately - Work upwind or increase ventilation - Contain spill using dikes of soil, sand, or commercial spill pads to prevent entry into drains and waterways - Absorb bulk liquid; collect in sealed, labelled drums for disposal - Notify local emergency services if sewers, waterways, or agricultural areas are contaminated

****Emergency contact numbers**** - Selleys technical support: 1300 555 205 - 24-hour Australian emergency hotline: 1800 220 770 - 24-hour New Zealand emergency hotline: 0800 220 770 - Australian Poisons Information Centre: 131 126 - New Zealand Poisons Information Centre: 0800 764 766

****Hygiene requirements**** - Wash hands thoroughly before smoking, eating, drinking, or using toilet facilities

General product claims

- Suitable for exterior applications including pergolas, outdoor furniture, covered patios, decking components, and window or door joinery with weather exposure - Suitable for high-humidity interior environments - Bond resists cyclic wetting, UV exposure, and temperature variation - Polymer structure engineered to resist hydrolysis under repeated moisture cycling - Crosslinking chemistry produces a three-dimensional polymer network that resists re-dissolution when wetted - Minimum clamp time for lightly loaded joints: several hours - Minimum clamp time for structural joints: 24 hours - Full cure achieved over 7 days before subjecting assemblies to maximum design loads or weather exposure - Cure time may extend to two weeks or more below 10°C - Optimal cure temperature: 20–25°C - Artificial heating of clamped assemblies should be avoided as rapid surface drying may trap moisture in the glue line - Freezing causes irreversible emulsion separation rendering the product unusable - Elevated storage temperatures accelerate crosslinking, increasing viscosity and potentially causing gelation - Ideal timber substrate moisture content for bonding: 8–12% - Timber moisture above 15% dilutes adhesive and extends cure unpredictably - Timber moisture below 8% may pull water from adhesive too quickly, preventing adequate penetration - Double-sided application recommended for open-grained hardwoods and end-grain joints - Single-sided application typically sufficient for edge-grain joints in softwoods or medium-density species - Correct clamping pressure produces a thin visible squeeze-out bead along the joint line - Excessive clamping pressure starves the joint of adhesive and reduces bond strength - Strong bonds produce wood fibre tearing (not adhesive layer separation) under destructive testing - Adhesive layer separation in destructive testing indicates inadequate surface preparation, insufficient clamping pressure, premature clamp removal, or degraded adhesive - Degraded adhesive is indicated by yellowing, foul odour, excessive thickening, or phase separation - Product marketed as having over 80 years of proven performance - Non-hazardous classification simplifies safety documentation and reduces regulatory reporting obligations for professional users - Ready-to-use formulation requires no mixing or conditioning steps

Related Products & Brand Context

Selleys Aquadhere Exterior belongs to Selleys' Aquadhere range, a family of woodworking adhesives produced by the Australian brand Selleys, which is widely recognised for adhesives and sealants across the home improvement and trade sectors. Within the Aquadhere line, the Exterior variant is

specifically formulated for outdoor conditions — distinguishing it from other products in the range that are intended for interior use. Its key differentiators are waterproof performance, resistance to temperature fluctuations, and UV exposure tolerance, which make it unsuitable to replace with a standard interior-grade wood glue on outdoor projects.

Within the broader category hierarchy, Selleys Aquadhere Exterior sits under Home & Garden > Adhesives & Sealants, occupying the wood-glue sub-segment alongside other bonding products aimed at timber construction and joinery. It is available in four sizes — 250 mL, 500 mL, 1 L, and 4 L — which positions it for both small repair jobs and larger construction runs such as decking, fencing, and garden structures. The 4 L format in particular points toward trade or high-volume DIY use rather than occasional household repairs.

For anyone using Aquadhere Exterior on an outdoor project, several adjacent product categories are worth considering. Surface preparation — cleaning, sanding, or priming the timber — is typically required before bonding to ensure maximum adhesion, particularly on weathered or treated hardwoods. Clamping tools or assembly aids would also be relevant, since the product reaches maximum strength in approximately 24 hours and components need to be held in position during that curing window. For finishing work on the same exterior timber project, exterior-grade timber paints, stains, or clear sealants from the same Home & Garden category would be natural companions, though specific complementary Selleys products in those categories are not confirmed in the available context.

Selleys' focus on advanced adhesive formulations — evidenced here by the waterproof and heat-resistant chemistry in Aquadhere Exterior — reflects the brand's broader positioning as a supplier of technically reliable bonding solutions for both DIY and professional applications in the Australian market.