

CHEMFIT ACRYLSEAL 2000

One Part Plastic Sealant Based on Acrylic Dispersion, Movement Capacity 10% – For Indoor Connection Joints with Low Movement in Concrete, Aerated Concrete, Plaster, Fiber Cement, Brick, Wood & UPVC

PRODUCT DESCRIPTION

ChemFit AcrylSeal 2000 is a one part, plasto-elastic sealant based on an acrylic dispersion, designed for indoor connection joints with low movement requirements. This high-quality, water-based sealant cures by physical drying to form a durable, flexible, and paintable seal. It offers excellent adhesion to a wide range of porous and non-porous building substrates without the need for a primer. The formulation is solvent-free, low odor, and environmentally friendly, making it ideal for interior use.

This product is suitable for filling cracks and sealing connection joints where movement does not exceed 10% of the joint width. It is compatible with water-based and many solvent-based paints, allowing the sealed joint to blend seamlessly with the surrounding surface.

PRIMARY APPLICATIONS

ChemFit AcrylSeal 2000 is recommended for use in conditions such as:

- Sealing of indoor connection joints with low movement on substrates such as concrete, aerated concrete, plaster, fiber cement, brick, wood, and UPVC
- Joints around window frames, door frames, and skirting boards
- Sealing joints between wooden window/door frames and masonry, plaster, or concrete
- Filling of cracks and gaps in walls and ceilings
- Sealing joints between building components and detachable parts in interior construction
- Connection joints in plasterboard, drywall, and ceiling panels

KEY FEATURES AND BENEFITS

- **One part, ready to use** – No mixing required; easy to apply with standard caulking gun
- **Low odor** – Solvent-free formulation suitable for occupied interior spaces
- **Good application properties** – Easy to tool and smooth with water
- **Excellent adhesion** – Bonds well to most common building substrates without primer
- **Movement capability 10%** – Accommodates low joint movement without failure
- **Painterly / over-paintable** – Can be painted with dispersion paints and many solvent-based paints after full cure
- **High durability** – Resistant to aging and UV exposure (indoor use)
- **Good storage stability** – Long shelf life when stored properly
- **Can be applied to slightly damp substrates** – Cures even on damp (not wet) surfaces
- **Available in 300 mL cartridge and 600 mL Unipack** – Suitable for small repairs or larger projects

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Chemical base	One-part acrylic dispersion
Consistency	Pasty, non-sag
Color	White, Grey (custom colors available on request)
Density	~1.40 – 1.60 g/cm ³
Skin formation time (at +23°C/50% r.h.)	~15 – 30 minutes
Curing rate	~1 – 2 mm per 24 hours (+23°C/50% r.h.)
Shrinkage	~15% max (DIN 52451)
Movement capability	±10% (max. allowed distortion)
Shore A hardness (28 days)	22 ± 6
Service temperature	-25°C to +80°C
Sag flow	Very good (non-sag)
Application temperature	+5°C to +35°C
Substrate temperature	+5°C to +30°C (min. +3°C above dew point)

PACKAGING AND STORAGE

Packaging:

- 300 mL cartridge
- 600 mL Unipack (aluminum foil bag / sausage pack)

Storage:

- Store in original unopened packaging in dry conditions, protected from direct sunlight
- Storage temperature between +10°C and +25°C (protect from frost)
- Do not store permanently above +30°C

Shelf life: 12 – 24 months from date of manufacture when stored properly in undamaged, unopened packaging

DOSAGE AND COVERAGE RATES

Joint dimensions: For standard connection joints, minimum width 10 mm, maximum width 20 mm. Recommended width-to-depth ratio of 2:1 (width double the depth).

For triangular joints: Sides must be minimum 7 mm, consumption is reduced by approximately 50%.

Formula for consumption: Joint width (mm) x Joint depth (mm) = mL per meter of joint

Joint Width x Depth	Consumption per meter of joint	Coverage per 300 mL cartridge
10 mm x 10 mm	100 mL	~3.0 m
15 mm x 8 mm	120 mL	~2.5 m
20 mm x 10 mm	200 mL	~1.5 m

NOTE: Coverage is approximate and varies with joint dimensions, substrate absorption, and application technique. These calculations are for standard rectangular joint cross-sections.

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be clean, sound, dry, and free from dust, oil, grease, laitance, loose particles, and any contaminants
- Remove old sealant, paint residues, and poorly adhering particles completely
- Substrate may be slightly damp but must be free of standing water and ice
- For porous and highly absorbent substrates, apply a primer coat by mixing sealant with water (1:1 to 1:5) before full application

Backing Material / Joint Fill:

- For joints deeper than the recommended depth, use a closed-cell polyethylene backer rod (e.g., ChemFit Backing Rod) as a bond breaker
- Backer rod prevents three-sided adhesion and ensures proper sealant depth
- Do not use backer rods containing bitumen or tar

Application:

- Cut cartridge nozzle at an angle corresponding to the joint width
- Apply masking tape to joint edges for clean, neat lines (remove tape immediately after tooling)
- Apply sealant into the joint, forcing it firmly against the joint sides to ensure full contact and avoid air entrapment
- Tool the sealant immediately after application with a water-moistened spatula or brush
- For corner joints, apply as a triangular bead

Curing Times (at +23°C/50% r.h.):

- Skin formation: ~15-30 minutes
- Through cure: ~1-2 mm per 24 hours
- Full cure: 1-3 weeks (depending on joint cross-section and humidity)

Overpainting:

- Sealant can be over-painted with water-based dispersion paints once fully cured
- Test compatibility before painting large areas
- When painting over sealant, the joint should not be subject to frequent expansion/contraction

Limitations:

- For indoor use only (exterior exposure not recommended for standard grade)
- Do not use in floor joints, sanitary/wet areas, or joints with permanent water immersion
- Do not use on marble, natural stone, bituminous substrates, or materials that bleed oils or plasticizers
- Not suitable for glass sealing or civil engineering applications
- Do not use on easy-corroding substrates like bare steel or iron without primer
- Not for use as a structural adhesive

HEALTH AND SAFETY

Acrylic sealant may cause mild eye and skin irritation. If eye contact occurs, rinse immediately with plenty of water for 15-20 minutes and seek medical attention if irritation persists. For skin contact, wash immediately with soap and water. If swallowed, do not induce vomiting; rinse mouth and drink water, then seek medical advice. Use gloves and safety glasses during handling. Ensure adequate ventilation. Fresh, uncured sealant can be removed with a wet cloth. Refer to the Safety Data Sheet for detailed information.

CLEANING OF TOOLS

Clean all tools, nozzles, and equipment with water immediately after use before the sealant cures. Cured material requires mechanical removal. Masking tape should be removed while the sealant is still soft.

APPROVALS AND STANDARDS

ChemFit AcrylSeal 2000 complies to the following standards:

- Meets requirements of report no. 12 "Dispersion-based joint sealants for aerated concrete components" issued by Bundesverband Porenbetonindustrie e.V. (Federal Association Aerated Concrete Industry)
- **DIN 52451** – Shrinkage testing
- **DIN 53479B** – Specific gravity testing
- **DIN 53505** – Shore A hardness testing
- **ASTM 2202** – Flow/sag resistance testing

- **VDI 6022** – Suitable for installation in ventilation and air conditioning systems (hygiene requirements)
- Solvent-free, isocyanate-free, silicone-free – Low environmental impact
- **ISO 9001** – Quality management system certified
- One part plastic sealant based on acrylic dispersion
- Suitable for indoor connection joints with low movement in concrete, aerated concrete, plaster, fiber cement, brick, wood, and UPVC

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

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