ACTFLEX 75FC.

Technical Data Sheet Multi-Purpose Fast Cure Polyurethane Adhesive Joint Sealant 23/01/2025

Description

ACTFLEX 75FC is a rapid moisture-curing polyurethane joint sealant and versatile adhesive renowned for its high modulus and flexibility. Following the curing process, it establishes an enduringly elastic connection, proficiently accommodating materials possessing disparate coefficients of expansion. This multifunctional solution finds utility in sealing and waterproofing applications, expertly addressing corner junctions, gaps, penetrations, cracks, and diverse joints.

Advantages

- As a joint sealant for vertical and horizontal joints.
- As a joint sealant for solvent based waterproofing applications.
- Bonding PVC (with primer), Metal angles to concrete, FC sheeting and timber
- As an elastic joint sealant for sealing joints in concrete.
- Sealing penetrations in walls and floors for piping etc.
- Vehicle bodies and cab construction including panels, underbody components, and roofing.
- Waterproofing exterior lap seams in many applications, e.g., truck trailers, RV's, metal roofs, window perimeters
- Easy to apply.
- Very good adhesion to a wide range of substrates.
- One part, ready to use.
- Cures rapidly to a permanently elastic consistency with excellent tear resistance.
- Low odor, non-staining.
- Non-Sag.
- Good mechanical properties.
- Can be over painted after full cure. (Preliminary tests recommended).
- Non-corrosive.
- Provides shock resistance and vibration damping.
- Exhibits high recovery, making it ideal for sealing moving joints.
- Weather and aging resistant.
- High durability.

ACTFLEX 75FC Properties

Chemical Base	Polyurethane
Colour	Grey
Cure Mechanism	Moisture-Curing
Density (DIN 53479)	1.40 ± 0.05 kg/l
Sag properties	1mm (20 mm profile, +25 °C)
Application Temperature	10°C-26°C
Skin Time @ 25°C 50%RH	65 Min.
Cure Time @ 25°C 50%RH	3.5mm / 24hrs approx. 5 Days when using in water immersion applications

Shrinkage	5% Approx
Shore A Hardness (DIN 53505)	38 Approx.
Tensile Strength (DIN 53504)	2N/Mm2 Approx
Elongation at Break (GB/T 528)	550%
Tear Propagation Resistance	≥6N/ mm
Movement Accommodation Factor	12.5%
Service Temperature	-10°C to +65°C

Preparation

Good preparation is Essential. Allow all prep work to dry/cure before proceeding.

- Prior to application, ensure thorough preparation is complete and allowed to dry or cure.
- All surfaces must be structurally sound, meticulously clean, completely dry, and devoid of substances such as oils, grease, paint, and efflorescence that could hinder adhesion, leaving a solid, clean, and dry surface.
- Eliminate any protrusions that could puncture the joint sealant.
- Address any imperfections, voids, or blowholes using a high-strength non-shrink mortar.
- Confirm that all applied surfaces, including screeds, are sturdy and not prone to crumbling. The substrate must possess sufficient strength to withstand stresses caused by the sealant during movement.
  If necessary, insert backing rod to the required depth. Carefully rinse the detergent off, followed by a comprehensive rinse with clean water.

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Priming

- Ensure that primers are allowed to thoroughly dry according to specified drying times before proceeding with over-coating. Proper priming enhances the long-term adhesion of the sealed joint.
- For completely dry internal surfaces, apply one coat of ACTFLEX 700 PU Primer if planning to over-coat with a solvent-based product. Use ACTFLEX SUPERBOND 007 when applying to non-porous surfaces
- On external or uneven surfaces, utilize ACTFLEX EP 250 as the primer.
- When dealing with metal surfaces, apply ACTFLEX 007 SUPER BOND.
- For wood and PVC surfaces, opt for ACTFLEX 007 SUPER BOND.
- Exercise caution to prevent excessive primer application, which could lead to the formation of puddles at the joint's base.

Application

1. Start by removing the metal seal from the joint sealant cartridge. Then, trim the gun nozzle to your desired bead size and securely attach it to the caulking gun. Insert the cartridge into the caulking gun.
2. Utilize the caulking gun to extrude the **ACTFLEX 75FC** sealant into the joint. Ensure that the sealant is in complete contact with the sides of the joint while avoiding any air pockets.
3. Wider joints may necessitate multiple passes to guarantee that the **ACTFLEX 75FC** sealant fully adheres to the sides and bottom of the joint.
4. When aiming for precise and tidy lines, employ masking tape. Remove the tape while the sealant is still pliable.
5. If necessary, insert a backing rod into the joint after priming to ensure proper sealant support and adhesion.

Final Tooling

1. Without delay, use a curved spatula to firmly tool the sealant against the sides of the joint. This action promotes proper adhesion and results in a smooth surface finish.
2. For effective tooling, dip the curved spatula into a solution of 20% washing detergent in water. Prior to application, test this solution on a small area to ensure it does not cause any discoloration to the cured **ACTFLEX 75FC** sealant.
3. Any excess sealant should be promptly cleaned up. Use a cloth moistened with mineral turpentine to remove excess sealant. This helps maintain a neat and tidy appearance.

Sealing & Bonding

1. Prepare the substrate as outlined in the previously mentioned procedure.
2. Dispense **ACTFLEX 75FC** sealant in either strips or spots onto the bonding surface. Maintain a spacing of a few centimeters between these applications.
3. When utilizing the sealant to join surfaces together, it is imperative to apply pressure while positioning the bonded items. If necessary, utilize adhesive tape, wedges, or supports to maintain the assembled components in place during the initial curing phase.
4. If the weight of the assembly surpasses 7kg per square meter, adequate support must be provided for up to 15 hours to ensure stability.
5. In case of misplacement, the adhered element can be adjusted within the initial minutes following application. Reapply pressure as needed.
6. Optimal bonding strength will be achieved upon complete cure of the sealant.

Joint Design

- Maintain a minimum joint depth of 10mm.
  Ensure the joint width ranges from a minimum of 10mm to a maximum of 35mm for joints up to 12mm wide.
- For joints wider than 12mm, follow the width-to-depth ratio of 2:1.
- For joints up to 12mm wide, adhere to the width-to-depth ratio of 1:1.

Cleaning

Clean up immediately while still wet. Wipe down with solvent to clean tools & equipment. Once dry, is difficult to remove and mechanical means may be necessary. No.1. Observe all OH&S and MSDS information pertaining to safe usage and handling of solvents.

DO NOT discharge product or water from cleaning into sewer or waterways.

DO NOT touch the spill material.

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Important Notes

- **ACTFLEX 75FC** is best stored at temperatures between 10°C & 25°C in dry areas
- **ACTFLEX 75FC** is moisture-cured, permit sufficient exposure to air.
- For best results use opened sausage the same day otherwise the **ACTFLEX 75FC** in the nozzle will cure and have to be removed.
- When applying sealant, avoid air entrapment.
- Do not use in movement expansion joints. Joint movement must not exceed +10% of joint width.
- **ACTFLEX 75FC** is not recommended for use in swimming pools or swimming spas.
- **ACTFLEX 75FC** may yellow and chalks when exposed to UV.
- Allow to cure for 5 days when using in water immersion applications.
- May be painted after full cure with conventional acrylic paints but preliminary. Joint movement may result in the paint cracking.
- When painting over we recommend that a compatibility test should be performed to determine that paint dries properly and that the paint does not soften or stain where it comes into contact over the **ACTFLEX 75FC** or when exposed to heat and the sun.
- Do not use mineral turpentine or solvent based solutions as tooling aids. **ACTFLEX 75FC** has non-adhesion to silicon and bituminous substrates.
- Non-resistant to alcohols, organic acids, concentrated alkalis and concentrated acids, chlorinated (hydro-carbons) fuel.
- Ensure epoxy resin coatings are fully cured prior to use of ACTFEX 75FC as the uncured components may inhibit the cure of the **ACTFLEX 75FC**.

Storage and Shelf Life

10 Months when stored in the original, unopened/undamaged containers, in cool dry conditions and protected from sunlight at temperatures between 10°C and 25°C. The shelf life of polyurethane sealant is related to the temperature and humidity of the environment.

The recommended storage temperature is 10-25°C, humidity is ＜50% R.H.
Do not transportation or store in areas with temperature is over 28°C or the humidity is over 80% R.H.

Packaging

600 mL cylindrical foil singular or box of 20

Safety – When Handling Do Not Eat, Drink or Smoke

ACTFLEX MS PRO is hazardous and may cause skin and/or eye irritations. Use for intended purpose only. Observe good industrial hygiene. Keep all sources of ignition away. Always use in a well-ventilated area and wear Personal Protection Equipment (PPE. Change soiled work clothes and wash hands before breaks and after finishing work. In case of eye contact, rinse with plenty of water: If inhaled, remove to fresh air, if discomfort persists, if any breathing difficulties occur or if swallowed (do NOT induce vomiting), immediately contact Doctor or Poisons Information centre and seek medical attention. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or 0800 764 766 (NZ). or a doctor for advice. IN TRANSPORT EMERGENCY DIAL 000 – POLICE-FIRE BRIGADE. Local regulations as well as health and safety advice on packaging labels must be observed. For more information, please download a copy of the SDS from www.forspec.com.au

KEEP OUT OF REACH OF CHILDREN.

DO NOT allow wash water from cleaning or process equipment to enter drains.
DO NOT discharge into sewer or waterways.
DO NOT seal or stopper drums being decontaminated as CO2 gas is generated and may pressurise containers.

Data Sheet

This Technical Data Sheet and the Material Safety Data Sheet (SDS) may be revised at any time to comply with relevant changes to the Australian Standards or to include changes to current technology. Always read the current SDS and TDS carefully prior to use, as application and performance data may change from time to time. It is always best to request a copy of the latest technical data from Actech Protective Coatings by calling 02 8021 3517 or emailing info@forspec.com.au. Data provided is typical but does not constitute a full specification. This should be sighted from the company for specific projects.

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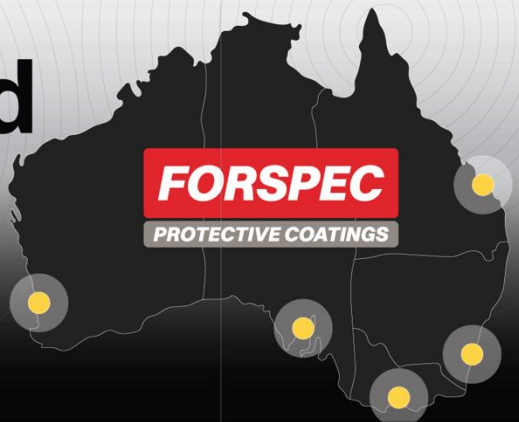

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