

ACTFLEX POLYCRETE

TECHNICAL DATA SHEET

ACTFLEX POLYCRETE

15/08/2023

DESCRIPTION

ACTFLEX POLYCRETE is an advanced engineered blend of solvent polyurethane resin meticulously formulated to achieve a robust structure with high-tensile strength. It can be used for screeds, ramps, deep or shallow indentations, levelling compound, sand banks and a patching compound. This versatile solution, when mixed with traditional sand and cement, aggregates, or quartz, yields a resilient and adaptable compound ideal for diverse applications. It excels in adhering to polyurethane and cementitious surfaces while ensuring effective water run-off and the levelling of uneven floors, with application thickness ranging from 1mm to 80mm.

PACKAGING

• 20L

PROPERTIES

Appearance:	Translucent Gloss, Viscous Liquid.	Flash Point:	>23 OC.
Odour:	Minimal Solvent Odour.	Density @ 25oC:	1-1.2 G/ML.
Solvent Resistant:	Good.	Volatile Content:	<70 %(W/W).
Toxicity:	Dry Film Is Not Toxic.	Work Time, Minimum:	45 Minutes At 20°C And 50% R.H. 30 Minutes At 30°C And 50% R.H.
Solubility:	Soluble In Organic Solvent Insoluble In Water.	Pedestrian Traffic:	6 Hours At 25°C And 50% R.H.
Waterproof Time:	3 Hours At 25°C And 50% R.H	Application Temperature:	10°C – 30°C.
Coverage:	20L Resin/ 120kg Aggregate	Shelf Life:	6 Months
Usable Period After Opening:	Within Same Day	Compressive Strength With Sand:	39-42MPa
Solids:	100%	Compressive Strength With Aggregate:	45-55MPa
Cure Time:	24 Hours	Flexural Strength:	9+ MPa
Full Strength:	7 Days		
Mixing Ratio (Weight):	6:1 (6 Part Aggregate/1 Part Liquid Resin)		

Coverage, Drying And Curing Rates Are Given As A Guide Only As They Can Be Affected By Surface Porosity, Humidity, Temperature, Climate Conditions, Ventilation, Application Technique And Dry Film Thickness. Improper Storage May Result In Instability Of Product.

Industry Applications: ACTFLEX POLYCRETE is exceptionally versatile, finding its utility in various industrial and commercial settings, including:

Key Benefits:

- Exceptional tensile strength
- Effective adhesion to diverse surfaces
- Facilitates efficient water drainage
- Economical levelling of uneven floors
- Rapid curing time
- Versatility across multiple industries
- Formulating a screed for use in both interior and exterior wet environments with minimal falls
- Automotive service bays
- Warehousing and distribution centres
- Applied above a waterproofing membrane on a substrate without falls or water ponding
- Suitable for use as a ramping system in high-traffic areas such as car parks or warehouses
- Engineered to provide durability and resistances to heavy loads
- Industrial flooring
- Food processing facilities

Surface Preparation for ACTFLEX POLYCRETE when used with aggregate Installation:

Proper surface preparation is critical for the successful application of ACTFLEX POLYCRETE. It includes a series of steps to ensure a seamless and durable finish. The preparation process should involve the following key aspects:

1. Surface Inspection:

- Begin by inspecting the substrate for any visible defects, cracks, or imperfections.
- Identify any existing polyurethane membranes, their condition, and the need for reactivation.

2. Moisture Level Assessment:

- Conduct moisture readings using a reliable moisture meter to determine the substrate's moisture content.
- Ensure the moisture levels are within acceptable limits for the specific application. Refer to industry standards or manufacturer recommendations for the acceptable moisture level based on the type of substrate.

3. Grinding and Scarifying (If Needed):

- If the substrate surface exhibits rough or uneven areas, or if existing coatings or residues are present, grinding or scarifying may be necessary to achieve a clean and level surface.
- Utilize appropriate grinding equipment to remove surface contaminants, delaminated coatings, or high spots, ensuring the surface is smooth and ready for the screed application.

APPLICATION

Substrates: ACTFLEX POLYCRETE when used with aggregates is suitable for the following substrates:

For CFC Floors (Internal and External):

- Ensure the substrate is clean, dry, and free of contaminants.
- Apply a coat of ACTFLEX POLYCRETE and allow it to dry before applying the ACTFLEX POLYCRETE with aggregate mix.

For Concrete Floors:

- Prepare the concrete surface by cleaning, repairing any cracks or imperfections, and ensuring it is thoroughly dry before applying the ACTFLEX POLYCRETE with aggregate mix.
- Apply ACTFLEX POLYCRETE on concrete surfaces before applying the ACTFLEX POLYCRETE with aggregate mix.
- Apply ACTFLEX EP 250 on concrete surfaces if moisture reading is above 5% before applying the ACTFLEX POLYCRETE with aggregate mix.

For Application on top of Waterproofing Membrane :

- The waterproofing membrane must be pre-primed with ACTFLEX POLYCRETE to ensure proper adhesion of the screed.
- It is necessary to apply a small test patch of ACTFLEX POLYCRETE with aggregate mix on a limited area. Allow it to cure completely before assessing its adhesion properties.

ACTFLEX POLYCRETE SCREED Mixing Ratios

Mixing Ratios: (DO NOT MIX WITH WATER)

1. Traditional Sand And Cement Mix Ratios:

- Use A 3:1 Or 4:1 Ratio Of Traditional Sand And Cement Mix.

2. ACTFLEX POLYCRETE Liquid Ratio: 6:1 RATIO

- For Every 6kg Of Sand-Cement Mix, Incorporate 1 Litres Of ACTFLEX POLYCRETE Liquid
- For Every 20kg Of 3:1 Or 4:1 Sand-Cement Mix, Incorporate 3 Litres Of ACTFLEX POLYCRETE Liquid.

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3. Working Time:

- Once Mixed, The Product Must Be Worked Within A 30-40 Minute Time Frame.

4. Application Technique:

- The Mix Must Be Thoroughly Worked In Using A Steel Float Trowel .

5. COVERAGE - A Combination Of 20 Kilograms Of Sand And Cement, Along With 3 Litres Of ACTFLEX POLYCRETE Applied

At A 10mm Thickness, Is Estimated To Cover Approximately 1 Square Meter Of Area.



ACTECH PROTECTIVE COATINGS

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LIMITATIONS:

1. AVOID SANDY FINISH:
 - THE SCREED MUST NOT BE LEFT WITH A SANDY FINISH; ENSURE A SMOOTH AND EVEN SURFACE.
 2. PROTECTION FROM WATER/RAINFALL:
 - THE SCREED MUST NOT BE LEFT EXPOSED TO WATER OR RAINFALL.
 3. PROTECTION FROM SUNLIGHT:
 - THE SCREED MUST NOT BE EXPOSED TO SUNLIGHT FOR MORE THAN 14 DAYS.
 4. PRIMING REQUIREMENT:
 - THE SCREED MUST BE PRIMED WITH A COMPATIBLE PRIMER BEFORE APPLYING ANY GLUES, WATERPROOFING, OR FLOORING PRODUCTS.
- **DO NOT MIX WITH WATER.**
 - DO NOT ALLOW ANY MOISTURE INTO THE POLYCRETE MIX.**
 - DO NOT USE WATER WITH ANY OF THE MIXING TOOLS.**
 - DO NOT WASH TOOLS WITH WATER OR USE AGGREGATE THAT HAS BEEN SUBJECT TO MOISTURE.**

HEALTH AND SAFETY, STORAGE

9 Months when stored locked up in original unopened containers in a cool, dry, well-ventilated place at temperatures between 10°C to 25°C. Storage above this temperature may reduce storage life. Uncured product is combustible so keep away from a sources of heat and ignition and its vapours and DO NOT store in pits, depressions, basements or areas where vapours may be trapped. Keep away from sunlight and moisture - AT 700 PU Primer is sensitive to airborne moisture. It is preferable to use all contents of the container after opening.

Being a moisture cured - Improper storage may result in instability of product in can.

SAFETY PRECAUTIONS

When handling DO NOT eat, drink or smoke. ACTFLEX POLYCRETE is hazardous and may cause skin and eye irritation. Immediately take off all contaminated clothing and thoroughly rinse area that has been in contact with product. Breathing vapours is harmful and may cause asthma like reaction. Use breathing respirators at all times. Organic vapour respirators with particulate pre-filters and powered, air-purifying respirators are NOT suitable. Wear protective gloves, clothing, and safety goggles with side shields and face protection. In case of eye contact, rinse with plenty of water for at least 15 minutes and contact Doctor or Poisons Information Centre. If swallowed do not induce vomiting and immediately contact Doctor or Poisons Information centre on 131 126 (AUS). Avoid release to the environment. Additional information is listed in the Material Safety Data Sheet SDS can be down loaded from www.thewaterproofingshop.com.au.

When handling DO NOT eat, drink or smoke. Always use in a well-ventilated areas and wear Personal Protection Equipment (PPE). Use breathing respirators at all times. Wash hands immediately after use. **DO NOT** allow material to contact humans, exposed food or food utensils. In case of eye contact, rinse with plenty of water: If inhaled, remove to fresh air: or if swallowed, immediately contact Doctor or Poisons Information centre on 131 126 (AUS) and 0800 764 766 (NZ). **IN TRANSPORT EMERGENCY DIAL 000 – POLICE-FIRE BRIGADE.** Keep containers in a well-ventilated place and tightly closed. 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.thewaterproofingshop.com.au KEEP OUT OF REACH OF CHILDREN

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 admin@actechpc.com.au

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