

Flowfast 215 Flexible Binder

Flowfast 215 Flexible Binder is a polyurethane modified resin based on acrylic monomers and polymers.

Uses

Flowfast 215 Flexible Binder is an elastified resin binder intended for the formulation of flexible membranes and flexible, wear resistant coatings exposed to sub-zero temperatures. It is mainly used for waterproofing and shock absorbing membranes, flexible floor coverings especially if exposed to low temperatures e.g. coolers and freezers and as a wearing layer for outdoor applications exposed to heavy mechanical loadings and rapid temperature variations i.e. ramps, bridges and carparks.

Environment & Health

Follow the appropriate Occupational Health and Safety guidelines applicable to the location where the application is undertaken. For more information, please refer to the safety datasheets for the individual components. Safety Data Sheet must be read and understood before use.

Features & Benefits

- Flexible & crack bridging at low temperatures
- Flexible membrane & coating
- Free from plasticiser
- Indoor and outdoor applications

Packaging

The product is supplied in full units.

Flowfast 215 Flexible Binder	20 kg	20 ltr
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Standard Coverage

The Flowfast 215 Flexible Binder can be filled up to a ratio 1:2 with appropriate filler; see specific system Technical Data Sheets for further information.

Curing Times (at 20°C)

Min Overcoating	1 hour
Foot Traffic	1 hour
Vehicular Traffic	2-3 hours
Full Chemical Cure	2-3 days
* Do not cover or wash within the first 2 hours of curing.	

Technical Information

VOC Content	86 g/L Complies with Green Building Council of Australia Green Star Design & As Built V1.2-13.1.1B Green Star Interiors V1.2-12.1.1B
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Characteristics (Liquid State)

Viscosity, 25°C (EN DIN 53019)	150-220 mPa·s
Density, 23°C (ISO 1183)	1.0 kg/l

Characteristics (Cured State)

Tensile Strength at RT (EN ISO 527)	15.9 MPa
Tensile Strength at 0°C (EN ISO 527)	24.9 MPa
Elongation at Fracture at RT (EN ISO 527)	249%
Elongation at Fracture at 0°C (EN ISO 527)	147%
Modulus of Elasticity at RT (EN ISO 527)	139 MPa

Modulus of Elasticity at 0°C (EN ISO 527)	444 MPa
Density, 20°C (ISO 1183)	1.1 kg/l
*Please note that an objective comparison with other data is only possible if norms and parameters are identical.	

Application Temperature

Ambient temperature range	-0°C - +35°C
Substrate temperature range	-0°C - +35°C
Ambient relative humidity	<95%
Substrate relative humidity (for primers)	<5.5% (TRAMEX scale or 92% RH BS 8203)

The substrate temperature should always be at least 3°C above the dew point temperature.

In closed rooms a forced ventilation with at least 7-fold air exchange per hour is recommended.

To assess possibility of application outside of these conditions or application temperatures below 0°C, please consult our Technical Department.

Substrate Requirements

Assumes a concrete base with a minimum 25 N/mm² compressive strength and 1.5 N/mm² tensile strength (latter as tested to EN 1542). Perform preliminary tests on critical and unknown surface.

Glazed surfaces must be removed from tiles before applying the primer (e.g. by diamond grinding or shot blasting). Loose tiles and tiles over hollows must be removed. Steel substrates must be prepared to SA 2.5 (to DIN 55929).

The area to be coated, must be pretreated with a suitable Flowfast primer (e.g. Flowfast 101 Standard Primer) including sanding. The substrate must be dry, firm, solid and free of dust, fat and oil. All substances that can prevent a good adhesion should be removed.

For further details, see our General Preparation and application guidelines for Flowfast floor protection systems.

Storage

Time	12 Months in Unopened Packs. If longer than 12 Months consult Flowcrete.
Temperature	Storage temperature between 15°C and 20°C.
Protection	Should be stored inside and protected from frost, weather, moisture, direct sunlight and contamination ingress.

Mixing

Please refer to appropriate Flowfast Technical Data Sheet as per required specification.

Prior to use, Flowfast 215 Flexible Binder must be carefully stirred to achieve a uniform distribution of paraffin contained in the product.

Flowfast 215 Flexible Binder is thoroughly mixed with the Flowfast Catalyst (C2) (50 % dibenzoyl peroxide), in accordance with the below guidelines.

It should be noted that the amount of Flowfast Catalyst (C2) powder to be added depends upon the application temperature.

Catalyst Addition Rates

Guidelines for Flowfast Catalyst Peroxan BPPLvr Addition to Flowfast 215 Flexible Binder		
Temperature	Weight % Catalyst	Gram Catalyst per 20kg
30°C	1.0%	200g
20°C	1.5%	300g
10°C	3.0%	600g
0°C	4.0%	800g
-5°C	5.0%	1000g
<-5°C	5.0%	1000g

Remark: The optimal product temperature is 15 – 20 °C. At temperatures below -5°C, the accelerator Flowfast 404 Accelerator should also be added. For further information contact our Technical Department.

Conversion:
1 cm³ of Flowfast Catalyst (C2) = 0.64 g
1 g of Flowfast Catalyst (C2) = 1.57 cm³

Add the required amount of catalyst to the resin and additive mix. Mix with slow speed drill and helical spinner, taking care not to entrain air. The topcoat can be coloured with the appropriate pigment on the job site (please refer to Flowcrete for more information).

Application / Pot Life

Ready-mixed product should be used within 15 minutes at a temperature of 20°C. At higher temperatures (or if left in bucket) the application time is shorter.

Decant mixed product into smaller quantities if applying small/detailed areas.

Application Method

Please refer to appropriate Flowfast Technical Data Sheet as per required specification.

The material consumption and application method depend in which of the Flowfast systems Flowfast 215 Flexible Binder resin is being used for; see specific System Build-up Sheets for further information. For further details see our "General Preparation and application guidelines for Flowfast floor protection systems".

In case that the wearing layer is applied on primer not scattered with quartz sand, it must be applied to primer within 4-6 hours to prevent adhesion problems.

For further details see our general preparation and application guidelines for Flowfast floor protection systems.

Cleaning

Tools and equipment can be cleaned with Flowfast 405 Cleaner or Solvents (MEK/Acetone) immediately after application, cured remains can be removed only by mechanical means. Please refer to SDS when using solvents.

Additional Notes

1. The product has reached full chemical cure after 2-3 days at 20°C.
2. The applied colours may differ from the examples shown.
3. Tremco CPG Australia Pty Ltd [Tremco CPG] assumes no responsibility for the application of incorrect colour.
4. It is the applicators responsibility to verify accuracy of colour prior to application. Tremco CPG does not bear any responsibility or accept claims for incorrect colour after application of material.
5. Do not cover or wash within the first 2 hours of curing at 20°C.
6. This system should be installed at 3°C above the dew point.
7. Please ensure application temperature and RH limits are followed.
8. Wind or strong airflow may cause quick curing and drying of the system.
9. Ensure wind or strong airflow is eliminated during application, however adequate safety ventilation should still be followed.
10. Whilst the product is low in VOC (<140 g/L complying with Green Building Council of Australia Green Star Design & As Built V1.2-13.1.1B Green Star Interiors V1.2-12.1.1B) this product will emit a discernible odour during application.
11. In closed rooms a forced ventilation with at least 7-fold air exchange per hour is recommended. To provide for outside these conditions, please contact our Technical Service.
12. Direct heat during application of the system can cause flash curing and potential delamination. Ensure you do not apply this system to substrates with temperatures exceeding 35°C.
13. A permanent hot water loading can result in a white discoloration of the Flowfast 319 Flexible Seal sealer. Hot water causes thermal tensions, that can lead to crackle cracks. Therefore, where Flowfast 319 Flexible Seal is used in areas of hot water loading, always gather waste or flowing water (particularly hot water) into channels and convey it into a proper drainage system. Provide for enough gullies.
14. Tremco CPG warrants all goods to be free from defects and will replace materials proven to be defective but makes no warranty as to appearance of colour. The information and recommendations herein are believed by Tremco CPG to be accurate and reliable.