



## Flowfast 319 Flexible Sealer

Flowfast 319 Flexible Sealer is a medium viscosity, UV-resistant, 2 component reactive methyl methacrylate resin (MMA).

### Uses

Flowfast 319 Flexible Sealer is used as part of the Deckshield Rapide and Flowfast range. In the liquid state it is blue-violet in colour. After polymerisation the sealer dries clear. Flowfast 319 Flexible Sealer resists occasional hot water spillage up to 90°C. The good flexibility and high UV resistance make Flowfast 319 Flexible Seal also an ideal sealcoat for outdoor applications.

### 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

- Medium viscosity
- Flexible and good UV resistance
- Suited for surfaces with regular water loading
- Indoor and outdoor applications

### Important Advice

A permanent hot water loading can result in a white discolouration of the Flowfast 319 Flexible Sealer. Hot water causes thermal tensions, that can lead to cracks. Therefore, where Flowfast 319 Flexible Sealer 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 a sufficient number of gullies.

### Packaging

The product is supplied in full units.

Flowfast 319 Flexible Sealer	20 kg	20 ltr
------------------------------	-------	--------

### Standard Coverage

0.3 -0.8 kg/m<sup>2</sup> per layer. The material consumption and application method depend in which of the Flowfast systems Flowfast 319 Flexible seal is being used for (e.g. higher consumption is expected in broadcasted systems); 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	33 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
-------------	--

## Characteristics (Liquid State)

<b>Viscosity, 25°C</b> (EN DIN 53019)	150 - 210 mPa·s (clear) 200 – 290 mPa·s (pigmented)
<b>Density, 23°C</b> (ISO 1183)	1.0 kg/l
<b>Flash Point</b> (ISO 1516)	+ 11.5 °C

## Characteristics (Cured State)

<b>Tensile Strength at RT</b> (EN ISO 527)	10.6 N/mm <sup>2</sup>
<b>Elongation at Maximum Strength at RT</b> (EN ISO 527)	10.9%
<b>Elongation at Fracture at RT</b> (EN ISO 527)	10.9%
<b>Modulus of Elasticity</b> (EN ISO 527)	491 N/mm <sup>2</sup>
<b>Density, 20°C</b> (ISO 1183)	1.1 kg/l

## Application Temperature

<b>Ambient temperature range</b>	-5°C - +35°C
<b>Substrate temperature range</b>	-5°C - +35°C
<b>Ambient relative humidity</b>	<95%
<b>Substrate relative humidity (for primers)</b>	<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/mm<sup>2</sup> compressive strength and 1.5 N/mm<sup>2</sup> 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 pre-treated 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. Particles that can interfere with adhesion need to be removed. For further details, see our General Preparation and application guidelines for Flowfast floor protection systems.

## Storage

<b>Time</b>	12 Months in Unopened Packs. If longer than 12 Months consult Flowcrete.
<b>Temperature</b>	Storage temperature between 15°C and 20°C.
<b>Protection</b>	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 319 Flexible Seal must be carefully stirred to achieve a uniform distribution of paraffin contained in the product.

Flowfast 319 Flexible Seal is thoroughly mixed with the Flowfast Catalyst Peroxan BPPLvr (50 % dibenzoyl peroxide), in accordance with the following guidelines.

It should be noted that the amount of catalyst powder to be added depends upon the application temperature.

## Catalyst Addition Rates

Guidelines for Flowfast Catalyst Peroxan BPPLvr Addition to Flowfast 319 Flexible Sealer				
Temperature	Pigmented		Clear	
	Weight % Catalyst	Gram Catalyst per 20kg	Weight % Catalyst	Gram Catalyst per 20kg
30°C	1.0%	200g	0.9%	180g
20°C	1.5%	300g	1.0%	200g
10°C	3.0%	600g	2.0%	400g
0°C	4.0%	800g	3.0%	600g
-5°C	5.0%	1000g	4.0%	800g
<-5°C	5.0%	1000g	4.0%	800g

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 cm<sup>3</sup> of Flowfast Catalyst (C2) = 0.64 g  
 1 g of Flowfast Catalyst (C2) = 1.57 cm<sup>3</sup>

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 Flowfast coating system to be sealed must be dry, clean, free of dust and fat. Any fresh Flowfast coating system must be completely cured and cooled down. As a general principle all Flowfast coating systems can be resealed with any Flowfast sealer after proper cleaning.

The sealer must be applied to the wearing layer within 4-6 hours to prevent adhesion problems.

Immediately after the catalyst has been stirred in, the sealer is poured onto the floor in stripes (do not apply directly out of the mixing pails) and distributed onto the coating with a short-pile paint roller.

On quartz broadcasted coatings sealer can be pre-spread before rolling with a notched rubber squeegee. To avoid any possible formation of microbubbles in the sealer surface it is important to work with freshly mixed material, i.e. to catalyse smaller batches.

Material shall be spread and rolled immediately to an even layer thickness of not more than 0.3 – 0.8 kg/m<sup>2</sup>. If a thicker layer is required, it must be applied in two separate coats. In all cases, the final applied layer needs to be applied with a consumption of not more than 0.4 kg/m<sup>2</sup> to avoid yellowing.

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 30°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.