PROTECTIVE & MARINE COATINGS

Acrydur BC03
PRODUCT TECHNICAL DATA

PRODUCT DESCRIPTION

Acrydur BC03 is a solvent free, medium viscosity Methyl Methacrylate (MMA) slightly elasticized body coat used mainly as a versatile self-levelling floor screed by adding fillers such as sand or coloured quartz. The self-levelling options are ideal for dry areas without slopes and can be applied from 1 – 4 mm in thickness.

ADVANTAGES

- Rapid curing
- Used as a binder for self-levellers
- Excellent bond to substrate
- Very hard wearing

RECOMMENDED USE

- As a body coat screed or resin rich base for Acrydur flooring systems

PRODUCT DATA

Colours:	Clear
Finish:	N/A
Flash Point:	+ 10ºC
Cleanser/Thinner:	N/A
Pack Size:	25 kg, 190 kg
Mixing Ratio:	The base requires 1-6% hardening powder depending on site conditions
Density:	Approximately 0.98 g/cm^3
Shelf Life:	12 months when stored in unopened containers
Storage:	Keep out of direct sunlight. Store in a dry place, between 15°C – 20°C
Recommended Application Methods:	Squeegee and Trowel

Application at 20°C

Hardening times:	30 minutes or once surface has lost tackiness
Pot Life:	Around 15 minutes from mixing

The amount of material to be prepared for application should be calculated. Do not prepare more material than what can be applied correctly within the pot life.
All mixed products must be used within the pot life time limit, if the product is left in the container after mixing and not used, it may release hazardous fumes due to exothermic reaction.

Coverage Rate: Typically 2 - 5 kg/m^2 (Theoretical)
Coverage rate is calculated based on a sealed and smooth surface and may vary based on the substrate roughness and other conditions.

System Thickness: Typically 2 - 4 mm

The suggested thickness range is calculated based on average volume solid as a general recommendation for the specified condition and for each application may vary.

Acrydur BC03

SURFACE PREPARATION

New Concrete Floors: New concrete must be clean, sound, dry, fully cured and surface laitance removed by vacuum enclosed shot blasting or mechanical grinding, a minimum strength of 25N/mm² is required.
Existing Concrete Floors: Remove all dirt, oil, grease, old paint or any other surface contaminants by vacuum enclosed shot blasting, scarifying or mechanical grinding. Fats, oils or greases must be removed by mechanical means and detergent washing and making sure all residue of detergent is washed and removed by rinsing with clean water. Local repairs should be carried out using **Acrydur RM01 and Acrydur RM02**.
Existing Floors (previously coated): All previous coatings and loose floor paints must be removed by mechanical preparation as described in the above section and primed as specified. If the old resin flooring cannot be removed then please consult with our technical team for advice on intercoat adhesion and suitability, as it may not be compatible with the existing floor coating. Where **Acrydur BC03** is applied to concrete surfaces, care must be taken to ensure that surface preparation is thorough but does not disfigure the surface.

PRIMING / APPLICATION CONDITIONS

Substrates should be primed prior to the application of **Acrydur BC03**. **Acrydur PR01, PR02 & PR03** are for priming substrates prior to the application of **Acrydur** flooring systems. Refer to product datasheets for different substrates. Porous substrates may require double priming.
The primer application should be lightly scattered with sand (approximately 0.7 – 1.2 mm in size) at an approximate rate of 0.3 kg/m^2.

Acrydur BC03 is supplied in pails or drums. Before mixing ideally precondition both **Acrydur** resin and the peroxide as well as the fillers and quartz components to a temperature of approximately 15 to 20°C.

The application temperature should be -10°C to 35°C throughout the application and the curing period.

MIXING

Prior to use, stir the **Acrydur** to obtain an even distribution of the paraffin contained in the product. With pourable mixes, the **Peroxide** is the last component to be added in the mix. For mortars, add the **Peroxide** prior to adding the aggregate. Pour the appropriate ratio of hardening powder into the container of resin (see table below). Mix until the **Peroxide** is completely dissolved.

Hardener addition % guidance

Temperature	Hardening powder	Pot life / minutes	Hardening time
+ 0 °C	6%	20	50
+ 10 °C	4%	20	45
+ 20 °C	2%	15	40
+ 30 °C	1%	12	30

NB: The quantity of hardening powder is always related to the amount of resin

Hardening powder must not be added to the reactive resin and resin/filler mix until immediately before application. In the case of pourable mixes, the hardener should be the last component added, while for mortars or very thixotropic resins the full amount of filler or thixotropic agent should be stirred in first. The hardening powder must always be stirred in and allowed to dissolve in the corresponding mixture or the pure resin. The stirring time will depend on the type and the condition of the mixing equipment used and on the temperature of the material.

APPLICATION

Acrydur BC03 is applied by roller, brush and squeegee to the primed and scattered surface. The mix should be spread coarsely to the desired thickness using a trowel or squeegee and then should be compressed and smoothed using a large smoothing trowel so that no pores and trowel marks remain in the floor. This product is particularly suitable for areas with higher slope as the mix does not level by itself.

The application of the system requires consistent and even technique to ensure the prevention of puddles and good compaction of the mix and to avoid pores and air bubbles within the stated tolerance of fillers and resin and depending on the thickness of the application.

In case of coatings and floors in areas between metal profiles and inlets, we recommend that elastic joints with the same decorative look being applied in the transition area. Otherwise temperature stresses could lead to forming of small cracks at the contact zone.

See Sherwin-Williams Acrydur System Guides for recommended floor systems.

TECHNICAL INFORMATION

The following figures are obtained from laboratory tests and our experience with this product.

Category Guide:	FerFA Category 3/4/5
Bond Strength: (BS EN 13892-8:2002)	>1.5 MPa (Substrate failure)
Water penetration:	Impervious
Abrasion Resistance: (BS EN 13892-4:2002)	AR1 (Less than 100 microns wear)

WARRANTY	DISCLAIMER
Any person or company using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk, and Sherwin-Williams can accept no liability for the performance of the product, or for any loss or damage arising out of such use. *The information detailed in this datasheet is liable to modification from time to time in the light of experience and normal product development, and before using, customers are advised to check with Sherwin-Williams, quoting the reference number, to ensure that they possess the latest issue.*	*The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.*

HEALTH AND SAFETY

Consult Product Health and Safety Datasheet for information on safe storage, handling and application of this product.

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