

## PRODUCT DATA SHEET

# Sikagard<sup>®</sup>-185

(formerly MasterProtect<sup>®</sup> 185)

Non-toxic, solvent free, high build, protective epoxy resin coating designed for spray application

## DESCRIPTION

Sikagard<sup>®</sup>-185 is a protective high build epoxy resin coating specifically developed to protect concrete. Supplied as a two-component system comprising pigmented base and a hardener in 1:1 by volume to produce an easily sprayable and chemical resistant finish. It is solvent free and can be used with safety in small rooms or tanks without the need to provide special ventilation. Sikagard<sup>®</sup>-185 coatings will not support the growth of bacteria.

## USES

- On precast pipe-linings
- External pipe coating

## FEATURES

- Durable
- Non-toxic
- Waterproof and protective
- Chemical resistance
- Solvent free
- High build coating

## PRODUCT INFORMATION

<b>Packaging</b>	400 L units, supplied in two pre-weighed components, base and reactor
<b>Shelf life</b>	3 months
<b>Storage conditions</b>	Sikagard <sup>®</sup> -185 shall be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5 °C and +30 °C.
<b>Appearance and colour</b>	<ul style="list-style-type: none"><li>▪ High gloss, heavy bodied, ultra dense surface. Hygienic and easily cleaned.</li><li>▪ Available in dark grey and black colour.</li></ul>
<b>Density</b>	~1.35 g/l (mixed, at 25°C)

## TECHNICAL INFORMATION

<b>Abrasion resistance</b>	≤ 50 mg (CS 10 Wheel, 1000 g, 1000 cycles)	(ASTM D4060)
<b>Dry film thickness</b>	Min. 400 microns	
<b>Tensile adhesion strength</b>	~2 N/mm <sup>2</sup> on concrete	(ASTM D4541)
<b>Water absorption</b>	After immersion – Nil After immersion and boiling – 0.1%	(ASTM D570)
<b>Resistance to growth of mould</b>	Resistance to bacterial growth	Resistant
	Resistance to fungal growth	Resistant

## APPLICATION INFORMATION

<b>Consumption</b>	5 m <sup>2</sup> / L / coat at 200 microns WFT, min. two coats are recommended. Note: This figure is theoretical and does not include for any additional material required due to surface porosity, surface profile, variations in level and wastage, etc..	
<b>Layer thickness</b>	Min. 400 microns DFT	
<b>Pot Life</b>	~30 min (25°C)	
<b>Curing time</b>	Initial cure	Final cure
	24 hours	7 days

## BASIS OF PRODUCT DATA

- All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
- Internal Reference - Version: MBS\_CC-UAE/Pr\_185\_09\_16/v5/11\_17/v6/10\_19

## FURTHER INFORMATION

Resistance to chloride ion penetration	Resistant	(AASHTO T259)
Resistance to sulphate ion penetration	Resistant	

## ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### EQUIPMENT

- For application by airless spray, use a 45:1 or higher ratio pump, minimum 9 m dia hoses and HD tip 19-23 thou.
- Automated spray equipment needs to be calibrated and suitable nozzle should be used.

## SUBSTRATE PREPARATION

- The substrate should be a smooth or semi-smooth sound concrete surface.
- It is most important to ensure that thorough surface preparation is undertaken prior to application of the Sikagard®-185 coating.
- Ensure concrete is free from excessive laitance, grease, oil, curing compound, etc.
- Ensure concrete is sound, cutting back where necessary and repairing with suitable products from SikaEmaco®, Sikadur® or Sikagard® repair system range.
- Ensure all blow holes and surface imperfections are made good prior to application of the Sikagard®-185 coating.
- Contamination by oil, grease, fats etc. must be removed before other forms of preparation begin.

## OVERCOATING

- Where areas need to be overcoated due to damage, etc. it is important that the areas to be treated are well abraded using a stiff rotary wire brush or coarse sand paper to give an adequate key.
- Completely strip off any unsound coating and proceed with overcoating as for new work.

## APPLICATION

- Sikagard®-185 coating can be applied using good quality rollers or short haired brushes or preferably by automated airless spray equipment.
- Prior to the application of each coat, surface should be examined for signs of pin-holing, etc.
- Where pin-holing is evident these should be filled using Sikadur® ADH 2200, thixotropic epoxy resin filler.
- For surface improvement, a thin coat of Sikagard®-720 EpoCem (epoxy/cement micro mortar), can be applied.
- If the application is delayed more than 16 hours at 40°C or 36 hours at 20°C after the previous coat (the higher the ambient temperature, the shorter the maximum period), then the previous coat must be thoroughly abraded to give an adequate mechanical key and solvent wiped.

## CLEANING OF EQUIPMENT

- All equipment must be cleaned immediately after use with a suitable thinner (Xylene / MEK / Acetone).
- Similar cleaning procedures should be adopted for break periods exceeding 15 minutes duration.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

## LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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ISO 9001, 14001, 45001 – SGS  
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- Master Builders Solutions LLC

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



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#### Sikagard®-185

April 2024, Version 01.01  
02030300000002049