

PRODUCT DATA SHEET

Sikagard®-1855

(formerly MasterProtect® 1855)

Single component, eco-friendly, high build hydrophobic coating for foundations

DESCRIPTION

Sikagard®-1855 is a single component, water based, protective coating formulated from high performance ester/acrylic polymers, able to be applied even upon green concrete at 24 hours after placing. When cured, Sikagard®-1855 provides excellent abrasion and chemical, including acid, resistance. Suitable for use in hot and tropical climatic conditions.

USES

Sikagard®-1855 is developed to protect concrete substrates from corrosion and deterioration. It is an ideal protective coating for underground structures and foundations and can be applied on green concrete, serving as a curing compound as well as protection, saving time, labor and cost.

FEATURES

- One component and easy to apply
- Good abrasion and chemical resistance
- UV stable
- Can be applied over damp surfaces
- Can be applied over green concrete to act as a curing compound in addition to a protective coating
- Environmentally friendly and safe to use (free from solvents and carcinogens, e.g. coal tar pitch, hydrocarbon-based solvents, etc.)

PRODUCT INFORMATION

Packaging	19 L unit
Shelf life	12 months from date of production
Storage conditions	Store in original, unopened, sealed and undamaged packaging in dry conditions at temperatures between +15°C and +25°C. Protect from direct sunlight, heat and moisture.
Colour	Grey
Density	~1.27 kg/l (25°C) (ASTM D1475)
Solid content by volume	~45 % (ASTM D2697-03)
Volatile organic compound (VOC) content	~13 g/l (EN ISO 11890 Part 2)

TECHNICAL INFORMATION

Tensile adhesion strength	≥ 1.0 N/mm ²	(ASTM D4541)	
Water absorption	~0.2 %	(BS 1881, Part 122)	
Chloride ion permeability	Very low	(ASTM C1202 : 2012)	
Chemical resistance	Lactic Acid 20%	Resistant	(ASTM D543)
	Acetic Acid 20%	Resistant	
	Nitric Acid 5%	Resistant	
	Ethylene Glycol 40%	Resistant	
	Copper Sulphate soln. 25%	Resistant	
	Zinc Sulphate soln. 25%	Resistant	
	Magnesium Sulphate soln. 25%	Resistant	
	Tap Water	Resistant	
	Sea Water	Resistant	
	Ground Water	Resistant	
	High Sulphate Water	Resistant	
	Distilled Water	Resistant	

Sikagard®-1855 is meant to be used as a protective coating against below ground environment and external applications. It is not suitable to be used as a high chemical resistant coating against strong acids and alkalis. Contact Sika Technical Services Department for specific details.

APPLICATION INFORMATION

Consumption	As a guide: 2.5 m ² per litre at 400-micron wet film thickness (WFT), per coat. Min. two coats application is recommended. Please refer to Method Statement for system specific coverage rates. Note: These figures are theoretical and do not include for any additional material required due to surface porosity, surface profile, variations in level and wastage, etc..
Layer thickness	Min. 360 microns dry film thickness (DFT), achieved by application in 2 coats, each 180 microns DFT. Higher thickness can be achieved with multiple coat cross-wise application.
Material temperature	+15°C min. / +35°C max.
Relative air humidity	≤ 85 %
Dew point	Temperature must be at least 3°C above dew point.
Substrate temperature	+10°C min. / +40°C max.
Waiting time to overcoating	6 - 7 hours at 25°C between 1 st and 2 nd coat. Refer to Method Statement if multiple coat application is required. Times are approximate and will be affected by changes in ambient conditions, particularly temperature and relative humidity.
Drying time	~45 min. at 25°C (ASTM D1640) Times are approximate and will be affected by changes in ambient conditions, particularly temperature and relative humidity.

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_1855_05_14/v5/12_18

FURTHER INFORMATION

General Method Statement (GMS)

IMPORTANT CONSIDERATIONS

- Do not apply or properly protect applied area, if imminent rain is expected.
- The drying time of the material is influenced by the humidity, wind speed, ambient and substrate temperatures. At high temperatures the time required for the coating to be surface dry is shortened accordingly.

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

SUBSTRATE PREPARATION

The surface to which Sikagard®-1855 is applied should be clean and free from oil, salt, grease and any other substances which may impair adhesion.

MIXING

Sikagard®-1855 should only be well stirred before use.

APPLICATION

Sikagard®-1855 can be applied by brush, short nap paint roller or airless spray, in min. 2 coats. Application should take place within the overcoating intervals of the coating. If the overcoating interval is missed, then the surface of existing coat should be lightly abraded and cleaned prior to re-coating.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with clean / soapy water immediately after use. Hardened and/or cured material can only be removed mechanically.

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 – TÜV
-Sika MB Construction Chemicals LLC
-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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