

PRODUCT DATA SHEET

Sikagard® M 338

(formerly MSeal M 338)

Water based, rigid epoxy coating for waterproofing and protection of concrete elements

DESCRIPTION

Sikagard® M 338 is a two component, water borne rigid epoxy coating for waterproofing and protection of concrete elements.

USES

- For both inside and outside use.
- For use on horizontal and vertical surfaces.
- For use on concrete and cementitious mortars.
- Protection of pipes, channels, tanks, sinks etc.
- For use on retaining walls, bridge facings and building structures.
- For early protective coating of fresh precast concrete elements
- For protection of tunnels.

Contact your local Sika representative regarding any application required not mentioned here.

CHARACTERISTICS / ADVANTAGES

- Water based, environmentally friendly.
- Excellent adhesion to concrete even when damp.
- Does not require an extra primer
- Once hardened it is impermeable to water and carbon dioxide.
- Good water vapour permeability – low risk of blistering.
- Resistant to water, weather and freezing conditions.
- Good chemical resistance.
- High abrasion resistance.
- Easy to apply by roller, brush or with airless gun.
- Easily cleaned and maintained.

APPROVALS / STANDARDS

Test report EN 12873-2:2005 for compliance with RD 140/2003.

PRODUCT INFORMATION

Packaging	Sikagard® M 338 is available in 25 kg kits consisting of 20.6 kg Part A + 4.4 kg Part in metal pails.
Shelf Life	12 months after date of production in unopened original packaging, if stored at below mentioned storage condition.
Storage Conditions	Store Sikagard® M 338 in cool and dry warehouse conditions; protect from freezing. No permanent storage over +30 °C.
Colour	Grey
Appearance / Colour	Part A: grey viscous liquid. Part B: colourless liquid.
Density	Approx. 1.35 kg/l (mixed material)

TECHNICAL INFORMATION

Shore A Hardness	Approx. 94		(EN ISO 868)
Abrasion Resistance	weight loss H22 wheel and 1 kg load	1090 mg	(EN ISO 5470-1)
Resistance to Impact	Class II: ≥ 10 Nm		(EN ISO 6272-1)
Dry film thickness	minimum 200 μm (in 2 coats)		
Tensile Adhesion Strength	Adhesion to concrete	> 3.0 N/mm ²	(EN 1542)
Thermal Resistance	-30 °C to +80 °C		
Capillary Absorption	0.02 kg/m ² ·h ^{0.5}		(EN ISO 7783-2)
Permeability to Water Vapour	$S_D = 7$ m		(EN 1062-3)
Diffusion Resistance to Carbon Dioxide	$S_D > 750$ m		(EN 1062-6)
Chemical Resistance	<p>Chemicals</p> <p>Group 1: Gasoline Group 3: heating oil, Diesel fuel, unused motor and gear oils Group 5: Mono- & poly alcohols, glycol ethers Group 10: Mineral acids (non oxidizing) $\leq 20\%$ and inorganic salts in aqueous solution (pH<6) Group 11: Inorganic bases and their hydrolysing salts in aqueous solution (pH>8) Group 12: solutions of inorganic non-oxidizing salts with a pH value between 6 and 8 Group 14: Aqueous solutions of organic surfactants</p> <p>For more information on chemical resistance, please contact our technical service.</p>	<p>Resistance to severe chemical attack:</p> <p>Class II (28d without pressure)</p>	(EN 13529)
Resistance to Weathering	Adhesion strength after freeze-thaw with de-icing salts (50 cycles) and thunder shower (10 cycles)	> 2.5 N/mm ² no blisters, scaling or cracking	(EN 13687-1, EN 13687-2)
Behaviour After Artificial Weathering	No defects observed		(EN 1062-11)
Reaction to Fire	Class B _{fl} -s1		

APPLICATION INFORMATION

Consumption	A minimum of two coats is required. First layer consumption is approx. 0.2 kg/m ² . Second and subsequent coats require approx. 0.25 to 0.3 kg/m ² each. These consumptions are theoretical and can vary according to the absorption and roughness of the substrate. It is essential to carry out representative trials on site to evaluate the exact consumption.	
Layer Thickness	Application thickness (wet film)	
	1st coat (200 g/m ²)	150 µm
	2nd coat (250 g/m ²)	185 µm
	Minimum total thickness, 2 coats (dry film)	200 µm
Product Temperature	+10 °C to +30 °C	
Ambient Air Temperature	+10 °C to +30 °C	
Relative Air Humidity	≤ 80 %	
Substrate Temperature	+10 °C to +30 °C	
Substrate Moisture Content	Substrate can be damp, but not wet.	
Pot Life	At +30 °C	approx. 40 – 60 minutes
	At +20 °C	approx. 70 – 90 minutes
	At +10 °C	approx. 120 – 150 minutes
Waiting Time / Overcoating	approx. 12 - 18 hours*	
Applied Product Ready for Use	Walkable after	approx. 24 hours*
	Fully cured after	7 days*
	* At 21±2 °C and 60±10% relative humidity. Higher temperatures or lower R.H. will shorten these times, and vice versa.	

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LIMITATIONS

- Do not apply at temperatures below +10 °C nor above +30 °C
- Do not add solvents, sand or other substances that could affect the product properties.
- Sikagard® M 338 can be applied outdoors, although slight yellowing is possible due to the effect of UV radiation.
- For applications in contact with drinking water, please check local regulations.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All substrates (new and old) must be structurally sound, dry, free of laitance and loose particles and clean of oil, grease, rubber skid marks, paint stains and other adhesion impairing contaminants.

The surface should be prepared by shot blasting, high-pressure water jetting or other suitable mechanical method.

After surface preparation the tensile strength of the substrate should exceed 1.5 N/mm² (check with an approved pull-off tester).

The temperature of the substrate must be at least 3 °C above the current dew point temperature.

Try to keep the temperature uniform during application and hardening.

MIXING

Sikagard® M 338 is supplied in two separate components in the correct quantities, ready for mixing. Pour Part B into Part A, ensuring to completely empty the pack of Part B, and mix with a slow speed drill and paddle (maximum 400 rpm) until a homogeneous mixture is obtained.

Avoid the inclusion of air. Part mixes are strictly forbidden.

APPLICATION

Sikagard® M 338 has to be applied in two coats, if required in three coats. The consumption per coat depends on the roughness of the substrate and the type of application.

Dilute the material with 10% clean tap water for the first coat. Subsequent layers need to be applied undiluted, when the first one is touch dry.

Sikagard® M 338 can be applied using a brush, a short hair roller or an air-less spray gun.

Parameters for spraying:

- Pressure: approx. 220 bar
- Flow rate: min. 5 l/min
- Nozzle size: min: 0.83 mm.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

SIKA HONGKONG LTD.

Rm.1507-12, Blk A, New Trade Plaza,
6 On Ping Street, Shatin, N.T., H.K.
Phone: +852 26868108
Fax: +852 26453671
Mail: marketing@hk.sika.com
Website: www.sika.com.hk



Product Data Sheet

Sikagard® M 338

September 2024, Version 03.01
02030300000002024

SikagardM338-en-HK-(09-2024)-3-1.pdf