

## PRODUCT DATA SHEET

# Sikalastic® M 689

(formerly MSeal M 689)

A highly elastic, ultra-fast curing, spray applied 100% polyurea membrane for use in waterproofing applications

### DESCRIPTION

Sikalastic® M 689 is a 2- part, solvent-free, pure polyurea, hot spray applied, elastic, very fast curing, waterproofing and protection membrane. The fast curing allows an immediate return-to-service time and the spray application allows fast coverage of the substrate.

### USES

Sikalastic® M 689 may only be used by experienced professionals.

It is used in a variety of waterproofing applications, especially where a high degree of chemical and mechanical resistance is required.

This includes:

- Waste water treatment plants (urban and industrial), both in the inflow and outflow areas.
- Sewage effluent pipelines.
- Steel and concrete pipes.
- Secondary containment bunds in chemical and petro-chemical industries.

Additionally, Sikalastic® M 689 can be applied on:

- Flat and architectural roofs.
- Horizontal and vertical substrates.
- Internal and external areas.
- Concrete, cementitious mortar or steel substrates.
- Reinforced concrete to protect it against carbonation, chloride induced corrosion or chemical attack in industrial environments.

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

### FEATURES

- Low emission (conform to AgBB)
- Low viscosity
- Excellent bond to substrate
- High moisture tolerance
- ultra-fast curing
- Monolithic membrane
- Excellent chemical resistance
- Waterproof and resistant to standing water
- Fully bonded to substrate
- High water vapour permeability
- High resistance to carbon dioxide diffusion
- High abrasion and impact resistance
- High elasticity and crack bridging capability
- Thermoset – does not soften at high temperatures

### CERTIFICATES AND TEST REPORTS

- CE Marking and Declaration of Performance to EN 1504-2 - Surface protection product for concrete - Coating

## PRODUCT INFORMATION

Composition	Pure polyurea		
Packaging	Part A (Polyamine)	200 kg drums	~203 litres
	Part B (Isocyanate)	225 kg drums	~203 litres
	Refer to current price list for packaging variations.		
Colour	Sikalastic® M 689 is available in the following colour combination: <b>Part A:</b> <ul style="list-style-type: none"><li>▪ Dark grey close to RAL 7043,</li><li>▪ Medium grey close to RAL 7042,</li><li>▪ Light grey close to RAL 7035</li><li>▪ Black</li><li>▪ Colourless (to be coloured with Sika authorized pigment paste by approx. 3 - 5 %. Stir well before use!)</li></ul> <b>Part B:</b> Unpigmented		
Shelf life	Part A: 12 months from date of production Part B: 9 months from date of production		
Storage conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +15 °C and +25 °C. Do not expose to direct sunlight. Always refer to packaging.		
Density	Part A	~1.01 kg/l	
	Part B	~1,11 kg/l	
	Mix	~1,10 kg/l	
	Values at +20 °C		
Product declaration	EN 1504-2: Surface protection product for concrete - Coating		
Viscosity	Temperature	Part A	Part B
	+ 25°C	220 mPas	800 mPas

## TECHNICAL INFORMATION

Shore A hardness	> 90	
Shore D Hardness	> 40	
Mechanical resistance	< 150 mg	H22 / 1000 g / 1000 cy
Resistance to impact	> 20 Nm (Class III)	(EN ISO 6272/2)
Tensile strength	> 20 N/mm <sup>2</sup>	
Tensile strain at break	~ 425 %	(DIN 53504)
Tear strength	58 N/mm <sup>2</sup>	(DIN 53515)
Crack bridging ability	Class A5	Static
	Class B4.2 (-20 °C)	Dynamic
Reaction to fire	Cfl-s1	(DIN EN 13501-1)
Chemical resistance	Resistant to many chemicals. Contact Sika Technical Services for additional information.	
Behaviour after artificial weathering	no changes	(EN 1062-11)
Permeability to water vapour	Sd value H <sub>2</sub> O < 5m	
Capillary absorption	0,002 kg/m <sup>2</sup> /h <sup>0,5</sup>	(DIN EN 1062-3)

Permeability to carbon dioxide	Sd value CO <sub>2</sub> > 120m	
Skid / slip resistance	63 (Class II)	Dry
	30	Wet
Service temperature	-30 °C min. / +130 °C max.	dry
	0 °C min. / +80 °C max.	high moisture, but not wet
	0 °C min. / +55 °C max.	wet

## APPLICATION INFORMATION

Mixing ratio	Part A : Part B = 1 : 1 (by volume)	
Consumption	~1,10 kg / m <sup>2</sup> / mm	
Layer thickness	> 2mm	
Material temperature	> +70 °C	
Ambient air temperature	+5 °C min. / +35 °C	
Relative air humidity	< 90 %	
Dew point	Beware of condensation. The substrate and uncured applied floor material must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the floor finish.	
Substrate temperature	+5 °C min. / +35 °C max.	
Substrate moisture content	< 4 %	
Curing time	Final cure ~24 hours at +20 °C Time is approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.	
Gel time	~8 seconds at +20°C	

## 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.

## FURTHER DOCUMENTATION

- Sika Method Statement: Sikalastic® M 689

## IMPORTANT CONSIDERATIONS

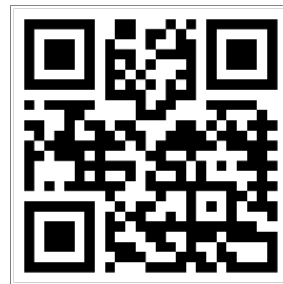
Reference must be made to the Sika® Method Statement: Sikalastic® M 689

## 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 Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## Regulation (EC) No 1907/2006 (REACH) - Mandatory training

As from 24 August 2023 adequate training is required before industrial or professional use of this product. For more information and a link to the training visit [www.sika.com/pu-training](http://www.sika.com/pu-training).



## APPLICATION INSTRUCTIONS

### EQUIPMENT

Reference must be made to the Sika® Method Statement: Sikalastic® M 689

## SUBSTRATE QUALITY

Reference must be made to the Sika® Method Statement: Sikalastic® M 689

## SUBSTRATE PREPARATION

Reference must be made to the Sika® Method Statement: Sikalastic® M 689

## MIXING

Reference must be made to the Sika® Method Statement: Sikalastic® M 689

Note: Both components must be heated up to +70°C. The accuracy of mixing and dosage must be controlled regularly with the spray equipment. Thoroughly stir Part A (Amine) using a drum stirrer until a uniform consistent colour is obtained.

## APPLICATION

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions. Prior to application, confirm substrate moisture content, relative air humidity, dew point, substrate, air and product temperatures. Reference must be made to the Sika Method Statement: Sikalastic® M 689

## CLEANING OF EQUIPMENT

Clean all tools with Thinner C immediately after use. The application equipment must be cleaned and filled with Mesamoll. Hardened material can only be removed mechanically.

## LOCAL RESTRICTIONS

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

## LEGAL NOTES

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

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