BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic® M 808

(formerly MSeal M 808)

Elastic polyurethane membrane for waterproofing and protection of concrete structures. Suitable for direct contact with potable water and foodstuff

PRODUCT DESCRIPTION

Sikalastic® M 808 is a two component, 100% solids, elastic polyurethane membrane, with high chemical and abrasion resistance. Approved for direct contact with potable water and foodstuff.

USES

Sikalastic® M 808 is used in waterproofing applications where contact with potable water or a high level of chemical resistance is required.
This includes:
- Water towers, storage tanks or any other water retaining structures.
- Interior coating to drinking water tanks.
- Storage tanks containing foodstuffs etc.
- Waste water treatment plants (urban and industrial), both in the inflow and outflow areas.
- Sewage effluent pipelines.
- Steel and concrete pipes.

Sikalastic® M 808 can be applied on:
- Horizontal and vertical substrates.
- Internal and external areas.
- Concrete, cementitious mortar or steel substrates. Reinforced concrete to protect it against carbonation or chloride induced corrosion and for protection against chemical attack in secondary containment

CHARACTERISTICS / ADVANTAGES

- Regulation 31 approved for use in contact with potable water
- Can be applied on vertical and horizontal surfaces.
- Easy to apply by roller or air-less spray equipment.
- Waterproof.
- Resistant to standing water.
- Elastic, flexible and crack-bridging.
- High chemical resistance.
- Protects concrete against carbonation and rebar corrosion: Once hardened it is impermeable to water and carbon dioxide.
- Excellent mechanical and elastic properties (elongation, tensile and tear strength, abrasion).
- Excellent adhesion on different substrates (concrete, steel and GRP).
- Excellent freeze/thaw resistance.
- UV resistant
- Thermoset – does not soften at elevated temperatures.
- 100% solids formulation, no risk for the environment and operative caused by solvent vapours.

APPROVALS / STANDARDS

- Approved for use in contact with potable water under: Regulation 31(4) (a) of the water supply (water quality) regulation 2016 for England and 2018 for Wales.
- Approved by Energy and Climate Change Directorate Drinking Water Quality Division, under Water Supply (Water Quality) (Scotland) Regulations 2014, 33(3) (a).
- Approved by the Department of Agriculture, Environment and Rural Affairs under Regulation 30 of the Water Supply (Water Quality) Regulations (Northern Ireland) 2017.
- WRAS approved for use in contact with potable water - approval no 2204528 (UK)

IMPORTANT NOTE
- **Specific instructions for use (IFU) for potable water applications must be followed and are available upon request.**
- **For all other applications follow the guidance within this technical data sheet.**

PRODUCT INFORMATION

Packaging	6.5 Kg and 13.5 Kg kits Refer to current price list for packaging variations.
Colour	Grey and light grey
Shelf Life	Part A & Part B: 12 months from date of production
Storage Conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +25 °C. Do not expose to direct sunlight. Always refer to packaging.
Density	Mix ~1.2 kg/L at +20 °C

Viscosity

Temperature	Part A	Part B
+ 23 °C	2680 mPas	450 mPas

TECHNICAL INFORMATION

Shore D Hardness	70			(EN ISO 868/07)
Abrasion Resistance	Mass loss < 350 mg (required < 3000 mg)			(EN ISO 5470-1)
Resistance to Impact	20 Nm			(EN ISO 6272/2)
Tensile Strength	> 20 N/mm²			(EN ISO 527-1/-2)
Crack Bridging Ability	A4	+23 °C	Static	(EN 1062-7)
	A3	-10 °C		
	A2	-20 °C		
	B2	+23 °C	Dynamic	(EN 1062-7)
	B2	-20 °C		

Chemical Resistance

Chemical Resistance acc. UNE EN ISO 4628-2 (500 hours, 21 °C)

Media	Resistance	Media	Resistance
Motor Oil	+	Sulphuric Acid 40%	+
Diesel	+ (*)	Sulphuric Acid 50%	±
Acetic Acid 5%	+	Sodium Chloride 25%	+
Citric Acid 5%	+	Sodium Chloride 30%	+ (*)
Lactic Acid 5%	+ (*)	Sodium Chloride 50%	+ (*)
Hydrochloric Acid 5%	+ (*)	Sodium Hydroxide 25%	+
Nitric Acid 5%	+ (*)	Sodium Hydroxide 50%	+
Phosphoric Acid 25%	±	Sodium Hypochlorite (Commercial)	+ (*)

+ resistant, **-** not resistant, **±** resistant short-term (48 hours), **+ (*)** resistant with changes (gloss, colour, etc.)
(*) check local regulations regarding contact to potable water and foodstuff

Property	Unit	Data
Resistance to severe chemical attack	% Reduction in hardness	Class II (required < 50%) Group 4 < 6% Group 9 < 10% Group 10 < 12% Group 11 < 9 % Group 12 < 4 %

Note: Hardening times are measured at 21 °C ±2 °C and 60% ±10 % relative humidity. Higher temperatures and/or higher R.H. can shorten these times, and vice versa. Technical data shown are statistical results and do not correspond to guaranteed minima. Tolerances are those described in appropriate performance. Measured values by an application of 0.4 kg/m² (equivalent to 0.3 mm) if not otherwise indicated.

Behaviour after Artificial Weathering	No change	(EN 1062-11)
Permeability to Water Vapour	6.2 m (Class II 5 < SD < 50)	(EN ISO 7783)
Capillary Absorption	0.001 kg/m²·h$^{0.5}$ (required <0.1)	(EN 1062-3)
Permeability to CO2	74 m (required >50)	(EN 1062-6)
Adhesion in peel	3.8 N/mm²	(EN 1542)

APPLICATION INFORMATION

Mixing Ratio	Part A : Part B = 100 : 52 (by weight)
Consumption	0.4–0.8 kg/m² in two coats
Product Temperature	+10 °C min. / +35 °C
Ambient Air Temperature	+10 °C min. / +35 °C
Relative Air Humidity	≤70 %
Substrate Moisture Content	≤4 %
Pot Life	~20-25 minutes (at +20 °C)
Curing Time	Final cure after 7 days at +20 °C Time is approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.
Tack Free Time	~6 hours (at +20 °C)

VALUE BASE

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.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

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.

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.

APPLICATION INSTRUCTIONS

APPLICATION METHOD

(a) Surface 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, highpressure water jetting or other suitable mechanical method. After preparation, concrete and other cementitious substrates must have a minimum pull off strength of 1.0 N/mm². Substrate temperature must be minimum +5 °C and maximum +35 °C and minimum 3 °C above the dew point both during the application and for at least further 2 hours (at 15 °C). The residual moisture content of the substrate must not exceed 4 % (check with e.g. CM device). Iron / steel: Should be sand blasted to a SA 2½ finish prior to application of the product.

(b) Primer coat

There are several priming options dependant on the moisture content of the concrete and the ground composition behind the host substrate. Contact the Sika technical department for guidance.

(c) Mixing

Sikalastic® M 808 is supplied in working kits which are pre-packaged in the exact mixing ratio. Pour the entire content of Part B into the container of Part A. DO NOT MIX BY HAND. Mix with a mechanical drill and paddle at a very low speed (max. 400 RPM) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles. Do not part mix packs.

(d) Application

Sikalastic® M 808 can be applied by brush, roller or by air-less spray machine. It is always recommended to complete the application in a minimum of two layers.

COVERAGE

The consumption of Sikalastic® M 808 is approximately 0.4 – 0.8 kg/m² in two coats, depending on the condition and porosity of the substrate and requested film thickness. This will provide a dry film thickness of 0.3 to 0.6 mm (300–600 microns). In harsh, abrasive environments it is important to apply a total minimum thickness of at least 0.5 mm in order to obtain the optimum performance. In chemically demanding environments (e.g. waste water treatment plants) a minimum thickness of 1 mm is recommended. Therefore, a minimum consumption of 1.2 kg/m² in two or three layers must be applied.

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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.

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 808

CLEANING OF TOOLS

Clean all tools with Thinner C immediately after use. The application equipment must 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 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

CONTACT DETAILS

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