

## PRODUCT DATA SHEET

# Sikalastic®-618

One-component, liquid applied polyurethane waterproofing membrane

## PRODUCT DESCRIPTION

Sikalastic®-618 is a one-component, cold applied, moisture-triggered polyurethane membrane. It cures to form a seamless and durable waterproofing solution for exposed roof areas and structures.

## USES

Sikalastic®-618 may only be used by experienced professionals.

- For roof waterproofing solutions in both new construction and refurbishment projects
- For roofs displaying complex detail areas, even when accessibility is limited
- For cost efficient life cycle extension of failing roofs

## CHARACTERISTICS / ADVANTAGES

- Single component - No mixing, easy and ready to use
- Cold applied - requires no heat or flame
- Seamless membrane
- Compatible with Sika® Reemat Premium - easy to detail
- Easily recoated when needed - no stripping required
- Economic – provides a cost efficient life cycle extension of failing roofs
- Vapour permeable - allows substrate to breathe
- Elastic - retains flexibility even at low temperatures
- Good adhesion to most substrates – see table
- Fast curing - Free from rain damage almost immediately on application

## APPROVALS / STANDARDS

- European Technical Assessment ETA-20/1016
- Fire Testing EN 13501-5, Sikalastic®-618, Warrington-fire, Reports available on request for various build ups
- Reaction to fire according to EN13501: Euroclass E
- CE marking and declaration of performance based on European Assessment document ETA-20/1016. (EAD) no. EAD 030350-00-0402 for Liquid applied roof waterproofing kits.
- Declaration of Performance No. 49622850 and provided with the CE marking.

## PRODUCT INFORMATION

Chemical Base	One-component, moisture-triggered aromatic polyurethane
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Packaging	15 l (~20.7 kg) metal pail
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Shelf Life	9 months from date of production
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## Storage Conditions

The product must be stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures  $>0\text{ }^{\circ}\text{C}$  and  $<+25\text{ }^{\circ}\text{C}$ .  
Higher storage temperatures may reduce shelf life of product.  
Reference shall also be made to the storage recommendations within the safety data sheet.

Colour	Cloud Grey (RAL 7045), Storm Grey (RAL 7011)	
Density	~1.38 kg/l (23 °C)	(EN ISO 2811-1)
Solid content by mass	~79 % (+23 °C / 50 % r.h.)	
Solid content by volume	~67 % (+23 °C / 50 % r.h.)	

## TECHNICAL INFORMATION

Tensile Strength	<b>Not Reinforced</b>	<b>Reinforced</b>	(EN ISO 527-3)
	~ 4.6 N/mm <sup>2</sup>	~ 18 N/mm <sup>2</sup>	
Elongation at Break	<b>Not Reinforced</b>	<b>Reinforced</b>	(EN ISO 527-3)
	~150 %	~20 %	
Service Temperature	-20 °C min./ +90 °C max.		
External Fire Performance	On non-combustible substrates	B <sub>Roof</sub> (t1) / B <sub>Roof</sub> (t4)	(ENV 1187)
	Over built up roofing system	B <sub>Roof</sub> (t1) / B <sub>Roof</sub> (t2)	
Reaction to Fire	Euroclass E		(EN 13501)
	Ext F.AA rating Non Combustible substrates		(BS 476-3)

## SYSTEM INFORMATION

### System Structure

#### Roof Coating\*

Sikalastic®-618 is applied in 1 or 2 coats

Total consumption  $\geq 1.0\text{ l/m}^2$  ( $\geq 1.42\text{ kg/m}^2$ )

Dry film thickness  $\geq 0.7\text{ mm}$

\*For partial reinforcement Sikalastic® Fleece-120 or Sikalastic® Flexitape Heavy is applied at areas with high movement, irregular substrate or to bridge cracks, joints and seams on the substrate as well as for details. For primer, please refer to the Substrate Pre-Treatment table below.

#### Reinforced Roof Waterproofing

Sikalastic®-618 is applied in one coat reinforced with Sika® Reemat Premium and sealed with a further coat of Sikalastic®-618

Layer	Product	Consumption
1. Primer	please refer to substrate pre-treatment	please refer to PDS of the Primer
2. Base coat	Sikalastic®-618	$\geq 1.0\text{ l/m}^2$ ( $\geq 1.38\text{ kg/m}^2$ )
3. Reinforcement	Sika® Reemat Premium	-
4. Top coat	Sikalastic®-618	$\geq 0.75\text{ l/m}^2$ ( $\geq 1.04\text{ kg/m}^2$ )

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.

# APPLICATION INFORMATION

<b>Ambient Air Temperature</b>	+5 °C min. / +40 °C max.		
<b>Relative Air Humidity</b>	5 % r.h. min. / 85 % r.h. max.		
<b>Substrate Temperature</b>	+5 °C min. / +60 °C max. ≥ 3 °C above dew point		
<b>Substrate Moisture Content</b>	≤ 4 % pbw moisture content. Test method: Sika®-Tramex meter No rising moisture according to ASTM (Polyethylene-sheet).		
<b>Substrates</b>	For applications onto podium decks, please consult Roofing Technical Services.		
<b>Pot Life</b>	Sikalastic®-618 is designed for fast drying. High temperatures combined with high air humidity will increase the curing process. Thus, material in opened containers should be applied immediately. In opened containers, the material will form a film after 1 hour approx. (+20 °C / 50 % r.h.)		
<b>Waiting Time / Overcoating</b>	<b>Ambient conditions</b>	<b>Minimum waiting time*</b>	
	+5 °C / 50 % r.h.	18 hours	
	+10 °C / 50 % r.h.	8 hours	
	+20 °C / 50 % r.h.	6 hours	
	+30 °C / 50 % r.h.	4 hours	
*After four days the surface must be cleaned and primed with Sika® Reactivation Primer before continuing.			
Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.			

<b>Applied Product Ready for Use</b>	<b>Ambient conditions</b>	<b>Rain resistant*</b>	<b>Touch dry</b>	<b>Full cure</b>
	+5 °C / 50 % r.h.	10 minutes	10 hours	19 hours
	+10 °C / 50 % r.h.	10 minutes	6 hours	10 hours
	+20 °C / 50 % r.h.	10 minutes	4.5 hours	6 hours
	+30 °C / 50 % r.h.	10 minutes	2 hours	4 hours
*Be aware that impact of heavy rain or rain showers can physically damage the still liquid membrane.				
Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.				

## 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.

## LIMITATIONS

- Do not apply Sikalastic®-618 on substrates with rising moisture.
- Sikalastic®-618 is not suitable for permanent water immersion.
- On substrates likely to exhibit out-gassing, apply during falling ambient and substrate temperature. If applied during rising temperatures “pin holing” may occur from rising air.
- Do not dilute Sikalastic®-618 with any solvent.
- Do not use Sikalastic®-618 for indoor applications.
- Do not apply close to the air intake vent of a running air conditioning unit.
- Do not apply Sikalastic®-618 directly on Sikalastic® Insulation boards. Instead use Sikalastic® Carrier

between Sikalastic® Insulation board and Sikalastic®-618.

- Volatile bituminous materials may stain and or soften below the coating.
- Areas with high movement, irregular substrates, or timber based roof decks require a complete layer of Sikalastic® Carrier.
- Do not apply cementitious products (e.g. tile mortar) directly onto Sikalastic®-618.
- Sikalastic®-618 may exhibit slight chalking at the surface – do not use run off water for live fish tanks, etc.
- Volatile bituminous materials may stain and or soften below the coating.
- Low melting point bituminous materials may need priming – using a darker shade also helps hide any staining from the volatiles.

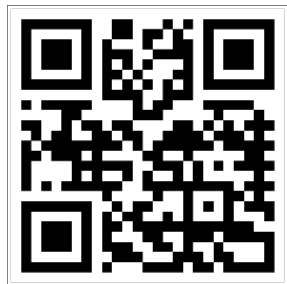
## ECOLOGY, HEALTH AND SAFETY

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.

### 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

### SUBSTRATE PREPARATION

The surface must be sound, of sufficient strength, clean, dry and free of dirt, oil, grease and other contamination. Depending on the material the substrate must be primed or mechanically cleaned. Grinding may be necessary to level the surface. Suitable substrates are such as: concrete, bituminous felts and coatings, metal, brickwork, asbestos cement, ceramic tiles, wooden substrates.

For detailed information regarding substrate preparation and primer chart please refer to Method Statement No. 850 915 09.

### MIXING

Mixing is not required, however if the product is settled or separated on opening, stir Sikalastic®-618 gently but thoroughly in order to achieve a uniform colour. Stirring gently will minimise air entrainment.

### APPLICATION

Prior the application of Sikalastic®-618 the priming coat if used must have cured tack-free. For the Waiting Time / Overcoating please refer to the PDS of the appropriate primer. Damageable areas (handrails, etc) have to be protected with tape or plastic wrapping.

#### Roof Coating:

Sikalastic®-618 is applied in two coats. Prior to the application of a 2<sup>nd</sup> coat the indicated waiting time in the table Waiting Time / Overcoating shall be allowed.

Roof coatings may need partial reinforcement over areas of stress or predictable movement eg joints overlaps detailing etc. Use Strips or sections of Sika Reemat Premium for reasonably sound surfaces –asbestos cement etc. For joints with moderate movement eg Metal Sheeting use Sika Flexitape Heavy incorporating bond-break

#### Reinforced Roof Waterproofing:

Sikalastic®-618 is applied in combination with Sika Reemat Premium.

1. Apply first coat of approximately 1 l/m<sup>2</sup> of Sikalastic®-618. Work only so far in advance that the material stays liquid.
2. Roll in the Sikalastic® Reemat Premium. Overlap it a minimum 5 cm and ensure overlaps are sufficiently wet to bond both layers.
3. The roller may require only a little extra material to keep wetted but no further significant material needs to be added at this stage.
4. After the coat is dry enough to walk on, seal the roof area with second coat of Sikalastic®-618 at a minimum 0.75 l/m<sup>2</sup> per coat.

Please note, always begin with details prior starting with waterproofing the horizontal surface. For details follow step 1-4.

### CLEANING OF TOOLS

Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured 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

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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### Product Data Sheet

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