

PRODUCT DATA SHEET

Sikatherm[®] Foam-755 SPF

(formerly MSeal 755SPF)

Seamless CFC,HCFC free, Spray applied Polyurethane Foam (SPF) for Thermal Insulation

DESCRIPTION

Sikatherm[®] Foam-755 SPF is two component polyurethane resin (PUR) based foam that is applied with a specially designed spraying machine. It provides high-performance thermal insulation in Building Envelope.

USES

Sikatherm[®] Foam-755 SPF is designed for use as an effective thermal insulation layer in Building Envelope; mainly on roofs, walls or cold stores where a seamless thermal insulation is required. It is to be used below our Waterproofing systems .

CHARACTERISTICS / ADVANTAGES

- Maximum thermal insulation – Maximum energy saving due to optimal insulation with no joints or thermal bridges
- Fast reacting – Rapid installation. Does not run when applied on vertical surfaces.
- Seamless – No risk of leaky seams and laps.
- Spray applied - Fast installation on large surfaces, easy application on complex details.
- Fully bonded – Eliminates water collection behind the foam and offers high wind uplift resistance.
- High compressive strength - withstand necessary load
- Good Chemical resistance - Against weak acids and bases, sea water, industrial waste gases, also aliphatic hydrocarbons (mineral oil, petrol, diesel)
- Quick Refurbishment - Usually no break-up of the old roof surface
- Solvent free – Improved safety

PRODUCT INFORMATION

Packaging	Part A (Polyol)	210 Kg blue-coloured drum
	Part B (ISO)	250 Kg red-coloured drum
Shelf life	6 months from date of production for both components when stored as per recommended storage conditions	
Storage conditions	The drums need to be stored clear off the ground in unopened original packing, in a room well protected from moisture and humidity. Keep Sikatherm [®] Foam-755 SPF cool in hot weather and warm in cold weather with temperature range from 15°C- 25°C. The components are hygroscopic hence reseal containers after use. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging and hence reduced shelf life.	

Density	Individual Components	Part A	Part B	(DIN 51757)
	Density (@ 25°C, kg/L)	1.1 ± 0.03	1.23 ± 0.03	
	Grade of Product (Mixed System)	SPF-40	SPF-50	(ASTM D1622-20)
	Core density, kg/m ³	36-40	49-53	
	Target density (with skin), kg/m ³	40-44	53-57	
Viscosity	Part A	250-350 cps at 25 °C		
	Part B	150-250 cps at 25 °C		

TECHNICAL INFORMATION

Compressive strength	Grade of Product	SPF-40	SPF-50	(ASTM D1621-16)
	Compressive Strength (with skin), kPa	250 ± 50	480 ± 50	
Design Considerations	Parameter	SPF-40	SPF-50	Standard
	Thermal conductivity, W/(m.K) @ +20 °C/ 52 % RH	<0.023	<0.023	(ASTM C518)
	Resistance to fire	Fire classification Available in both Class B2 & Class B3	Available in both Class B2 & Class B3	(DIN 4102)
	Cell Structure	Closed cells >90%	Closed cells >90%	(DIN 4590)
	Dimensional stability	< 1 %	< 1 %	(ASTM D2126)

APPLICATION INFORMATION

Mixing ratio	Part A : Part B	100 : 110 (By Weight)	100 : 100 (By Volume)
Consumption	To achieve average 50 mm thickness on 1 sqm area theoretically 2.1-2.2 kg of mixed SPF-40 OR 2.65-2.85 kg of mixed SPF-50 would be required. Consider 15%- 30 % extra consumption for over-spray and air-borne wastage as per site conditions.		
Ambient air temperature	+10 °C min. / +40 °C max.		
Substrate temperature	+10 °C min. / +40 °C max. Beware of condensation. Substrate temperature must be +3 °C above dew point.		
Gel time	11 ± 3 secs approx @ 20°C		
Skin time	Cream time is 6 ± 2 secs approx @ 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.

IMPORTANT CONSIDERATIONS

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted).

with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Do not reuse containers for storage of consumable item. Please refer the Material Safety Data Sheet for handling and storage of this product.

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

APPLICATION INSTRUCTIONS

Substrate Preparation

Any materials having a damaging effect on the covering with PUR Spray foam or impairing a good adhesion to the substrate are to be removed with suitable tools. Repair voids, cracks and unevenness in substrates before application. Very porous substrate must be pretreated

and sealed with suitable primer. The substrate to be treated must be clean, dry fat-free and free from sticking components.

The substrate temperature must be minimum +10°C, preferably +15°C. If the temperature is lower or substrate is damp the adhesion of foam will be insufficient. High humidity leads to the formation of bubbles, detachments, open cells and deterioration in the mechanical strength

Primer

Typically, no primer is needed on concrete substrates. However on poor quality or very porous substrates

Sikalastic®-10 Primer EP or similar may be used.

SPF Application

Sikatherm® Foam-755 SPF has extremely short reaction times and can be processed only using special PUR Spray equipment. The high reactivity of the system

allows a processing on vertical and ceilings without problems. In-situ foaming is carried out by means of mobile two component high-pressure machines equipped with a constantly operating pre-heating and with heated hoses. The heating have to be designed such that permanent

temperatures of 35°C to 50°C can be obtained. In order to obtain good mixture, mixing pressure of 100-110 bars is necessary.

Sikatherm® Foam-755 SPF can be applied in layers each of 10 to 50 mm thickness. Larger foam thicknesses are achieved by applying SPF in several layers. Higher densities are obtained by lower temperatures and/or thinner foam layers. Lower densities are obtained by higher substrate temperatures and thicker layer application. Avoid application when inclement weather is present or imminent.



Product Data Sheet

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Protection

If the area insulated with Sikatherm® Foam-755 SPF is exposed to atmospheric conditions it is necessary to provide them with UV Protective coatings as supplied by Sika®. If the application area is subjected to traffic provide protection with screed, tiles or soil (garden).

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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