



SOUPLETHANE 5 ATE

Solvent-free, two-component polyurea-urethane resin that provides a liquid waterproofing and corrosion protection membrane for roofing applications.

Technical Evaluation by CSTB (Avis Technique) / ETE-13/0156 - DTA N° 5.2/18-2615_V1

EUROPEAN CLASSIFICATION OF FIRE REACTION : Broof (t1)

Application Fields

SOUPLETHANE 5 ATE is used on all type of substrates: concrete, wood, insulating materials, metal, asphalt, bituminous membrane, tiles

External / Apparent use - New and refurbishment works - Liquid waterproofing of:

- inaccessible flat roofs accessible roof terraces technical flat roofs
- Balconies, loggias, corridors, bleachers, for private or public use

Characteristics

Chemical Nature	2-Component Polyurea-urethane resin (aromatic)	Mixing ratio	Comp. A / Comp. B = 3 / 1 in volume
Composition	Component A - polyol : Colored opaque liquid Component B – isocyanate : Transparent amber liquid	Density (at 20°C)	Mixture A+B : 1.3 g / ml (DIN 53217 / EN ISO 2811)
Solvent-free	100 % solid content (ISO 1515)	Bisphenol A-free	
Flash point Component A	248 °C	Flash point Component B	212 °C
Colors : Crème-Cream (Ivory, prox. Ral1015), gris-grey (prox. Ral 7040) – Others upon request			

Advantages

Double function: Waterproofing and Anticorrosion	
On new substrates and during renovation on existing waterproofing system	
Excellent adhesion: 4 MPa (concrete) / 9 MPa (metal)	
High resistance to cracking (> to 4 mm)	Bisphenol A-free
Fast start-up time	Solvent-free, Odor-free
Easy application	No chalking

Properties

Concrete adhesion	4 MPa (concrete failure) (NF EN 1542)	Shrinkage	0
Steel adhesion	9 MPa (NF EN 1542)	Tensile strength	>12 MPa (NF EN ISO 527-3)
Service temperature (air)	Air : - 20°C à + 80°C Backwater : max 60°C	Elongation	40 % (NF EN ISO 527-3)
Fire resistance	Broof (t1) (NF EN 13501-5 :2016)	Shore A Hardness	95 (ISO 868)
Chemical resistance	1 < pH < 13	Compression strength	113 MPa
Water permeability	No penetration (DIN 1048)	Chloride permeability	<10 coulombs (ASTM C 1202)
Chemical attack due to concrete	No effect	Salt spray resistance	2 000 hours (ASTM B117 / D1654)
Thermal shock resistance	- 50 °C to + 160°C		

Packaging	in kits
5 kg	Pre-dosed Kit
35 kg	(20 L component A + 7 L component B)
104 kg	(3 x 20 L component A + 1 x 20 L component B)
1 040 kg	(3 x 200 L component A + 1 x 200 L component B)

Storage

From the date of manufacture and in original unopened packaging, under cover at more than 5 °C in a cool, ventilated place (frost free)
Shelf life : 12 months

This product is used in accordance with the provisions of the Specifications, Technical Specifications, Technical Advice of the Company

KEMICA COATINGS Z.A. du Bois Gueslin F-28630 Mignières • France

Tel.: +33 (0)237 26 3356 • Fax: +33 (0)237 26 3358 • E-mail: info@kemica-coatings.com • www.kemica-coatings.com.

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Implementation

Preparation of the mixture	<ul style="list-style-type: none"> ☐ Thoroughly homogenize the polyol (A) before mixing ☐ Mix the mixture Comp A + Comp B with a mechanical stirrer for 40 seconds ☐ Then pour the product into a second container and resume mixing for 10 seconds. ☐ To minimize the air entrainment during mixing, it is advisable to perform this operation at low rotation speed (approx. 400 rpm), taking care to keep the agitator at the bottom of the bucket during its rotation.
Application	Check the humidity of the substrate, the relative humidity, the ambient temperature of the products and the substrates, and the dew point beforehand. If the humidity of the substrate is > 4%, the KEMIPOX or PU AQUEUX system can be used to form a barrier against ascending humidity. If an adhesion higher than 9 MPa is desired, Souplethane UR5 is recommended as an adhesion promoter (primer).

Substrate temperature	-20°C min. / +70°C max.	Dew point : The substrate must be at + 3 ° C above the dew point to reduce the risk of condensation.
Relative Humidity (RH)	< 95 %.	Treatment of singular points : according to the technical assessment (Avis Technique)

Roll or brush application	1 mm / layer (1,3 kg/m ²)	Spraying through high-pressure 2-component airless pump	
Application with notched comb	Up to 2 kg/m ²	Viscosity (20°C)	Comp. A : 3 800 cps / Comp. B : 150 cps
		Temperature	Component A : 35°C / Component B : 20°C
Thickness	1 to 3 mm	Pressure	180 / 200 bars
Covering time at 20°C	mini 5 h maxi 72h	Covering time	mini 5 h maxi 72h
Start-up time	24 h	Start-up time	24h

Pot life	Temperature	+ 10°C	+ 20°C	+ 30°C
	Pot life	~ 30 minutes	~ 20 minutes	~10 minutes
The pot life decreases as the temperature and / or amount of prepared product increases.				
Covering time	Before application of SOUPLETHANE 5ATE on KEMIPOX or PU AQUEUX			
	Temperature	+ 10°C	+ 20°C	+ 30°C
	Mini	24 hours	12 hours	8 hours
	Maxi	4 days	2 days	1 days
Drying / Start-up time	Temperature	+ 10°C	+ 20°C	+ 30°C
	Light loads	30 hours	24 hours	12 hours
	Full cure	15 days	9 days	7 days
These data are only indicative because the curing time varies according to the drying conditions (temperature and relative humidity in particular)				

Tools cleaning Tools are cleaned with acetone or MEK immediately after use. In the cured state, the product can only be removed mechanically.

- Substrates should not be under water pressure or condensation during the application and polymerization of SOUPLETHANE 5 ATE
 - Protect SOUPLETHANE 5 ATE from contact with moisture, condensation and water for 2 hours
 - Incorrect treatment of substrate defects will reduce the life of the coating.
- Notes on the application / limits**
- Beware of the gas exchange that may be caused by a warming of the substrate before the total polymerization which may lead to a bubbling (blistering) phenomenon. It is recommended to work by down temperature.
 - To avoid color differences, it is necessary to use a single lot number for each site.
 - An exposure of the coating under UV may alter its color or appearance, but without impairing its mechanical performance.

Qualifications

Technical Evaluation (CSTB) / ETE-13/0156 - DTA N° 5.2/18-2615_V1
 EUROPEAN CLASSIFICATION OF FIRE REACTION : Broof (t1)
 HQE A++ / Class A+ : Regulatory Labeling of VOC Emissions and Compliance with the AgBB Protocol (2012)

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