



# POLYUREA FR

ELASTOMERIC PURE POLYUREA  
MEMBRANE BASED ON AROMATIC  
ISOCYANATES AND FLEXIBLE AMINES



## DESCRIPTION

Two-component, spray-applied, elastomeric pure polyurea membrane based on aromatic isocyanates and flexible amines.

100% solids system. Reaction to fire Class E according to EN 13501-1.

Service temperature from -30°C to +170°C.

Designed for application using high-pressure plural-component spray equipment.

## FIELDS OF APPLICATION

- Waterproofing
- Roofing systems
- Parking decks
- Bridges
- Infrastructure
- Industrial plants
- Wastewater treatment
- Tanks
- Marine applications and civil engineering structures

## ADVANTAGES

- VOC-free
- No shrinkage or weight loss
- Excellent weather resistance
- Low permeability
- Application temperature from -15°C to +70°C
- Good chemical resistance
- Excellent crack-bridging capability

## COLOURS

- Grey RAL 7040
- Black RAL 9005
- Other colours on request

Date 15/10/2025

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## TECHNICAL DATA

Property	Value	Unit	Standard
Density (ISO) at 25°C	1,11-1,12	g/cm <sup>3</sup>	UNI EN ISO 2811-1
Density (Resin) at 25°C	1,00-1,05	g/cm <sup>3</sup>	UNI EN ISO 2811-1
Viscosity (ISO)	600-900	mPas	UNI EN ISO 3219
Viscosity (Resin)	300-600	mPas	UNI EN ISO 3219
Mixing ratio	1:1	by volume	EPALAB006.01
Gel time	12-20	sec	EPALAB007.01

## PERFORMANCE DATA

Property	Value	Unit	Standard
Tensile strength	10-14	MPa	ISO 527
Elongation at break	400-450	%	ISO 527
Tear strength	80-100	kN/m	ISO 34
Young's modulus	45-55	MPa	ISO 527
Abrasion resistance (Taber)	<450	mg	EN 5470
Hardness	80-90	Shore A	ISO 868
Hardness	35-40	Shore D	ISO 868
Water vapour diffusion resistance factor	2189	μ	EN 1931
Adhesion to concrete	>1,5	N/mm <sup>2</sup>	EN 1542
Impact resistance	Class II		EN ISO 6272



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## CHEMICAL RESISTANCE

CHEMICAL	CONDITION	Result
Water	28 days / 25°C	A
Methanol	28 days / 25°C	A
Acetic acid 10%	28 days / 25°C	A
KOH 50%	28 days / 25°C	A
Phosphoric acid	28 days / 25°C	B
Chlorine	28 days / 25°C	B
Propylene carbonate	28 days / 25°C	B
Dimethylformamide	28 days / 25°C	C

**A Excellent**

**B Good**

**C Low**

## APPLICATION

Application must be carried out by trained and qualified applicators.

Substrate moisture content  $\leq 4\%$ .

Substrate temperature must be at least  $+3^{\circ}\text{C}$  above the dew point.

Substrates must be dry, sound, clean and free from contaminants.

Surface preparation by grinding, shot blasting or milling.

## SUBSTRATE PRIMERS

PRIMER	Substrate
B-TECH EPOX 22	Cementitious substrates
B-TECH EPOX 25	Metal / wood
B-TECH EPACRETE OLV 13.30	Interlayers
B-TECH EPACRETE OLV 201	Cementitious / asphalt



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## PROCESS PARAMETERS

PARAMETER	VALUE
Ambient temperature	+5 +40°C
Substrate moisture	4%
Component temperature	+60 +80°C
Pressure	+60/+80°C
Pressione	120-200 bar

## PACKAGING

430 kg kit (Resin 205 kg + ISO 225 kg).

## STORAGE

Store between +5°C and +30°C. Shelf life 12 months.

## SAFETY

Wear appropriate PPE including gloves, goggles and protective clothing. Ensure adequate ventilation. Refer to SDS.

## DECLARATION OF PERFORMANCE

In accordance with EN 1504-2. System 2+.  
 Istituto Giordano 0407 CPR-1390.

## LEGAL NOTICE

The information and recommendations given above, although they correspond to our best experience, must in any case be considered purely indicative and must be confirmed by exhaustive practical applications. Therefore, before using the product, anyone who intends to make use of it must determine whether it is or is not suitable for the intended application and, in any case, assumes all responsibility that may arise from its use. Always refer to the latest updated version of the technical data sheet, available on the website [btechitalia.eu](http://btechitalia.eu).

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