

# Syntech Poliurea Spray-FR

Self-extinguishing pure polyurea for continuous coatings



Syntech Polyurea Spray-FR is a 100% solid polyurea, it does not contain VOC and can only be applied by spraying using suitable bi-mixer machines that have flow and temperature control and are capable of reaching pressures greater than 180 bar. Added with additives that improve the self-extinguishing properties. It is of the aromatic type and belongs to the Euroclass B s2 d0 according to the EN 13501-1:2005 standard for concrete and fiber cement and in the RAL 7040 colour. It is characterized by a high degree of elongation and this allows it to be used as a very high performance waterproofing, therefore suitable for tanks, tubs and hydraulic works in general. The great adhesion capacity on different supports, after using primer, allows its use on new or existing structures.

**CUSTOMS CODE:**

**COMPONENTS:** Two-components

**APPEARANCE:** Liquid + Liquid

**AVAILABLE COLORS:** Window grey

**PACKAGING AND DIMENSIONS:** Barrel 225 kg [A] - Barrel 205 kg [B] - Kit: 1 Barrel 225 kg [A] + 1 Barrel 205 kg [B]

## OBTAINED CERTIFICATIONS AND REGULATIONS



## FEATURES AND BENEFITS

The pure polyurea Syntech Poliurea Spray-FR guarantees excellent adhesion to the substrate, giving rise to a continuous membrane, without any joints and extremely resistant:

- environmentally friendly, VOC FREE
- extremely resistant to atmospheric agents
- excellent fire resistance properties
- no weight loss
- Excellent resistance to puncture, impact and abrasion
- Constant performance at temperatures - 30 °C / +130 °C
- High static and dynamic crack-bridging capacity
- Gel time 10 sec
- It does not weigh down the structure
- It adapts to any geometric shape

## FIELDS OF APPLICATION

SYNTECH POLYUREA SPRAY - FR is particularly used as a waterproofing on concrete or as a protective coating for water containment tanks, primary containment, flooring, purification plants, EPS coating, coating and protection of sheet metal, roofs, wooden balconies and canopies, tanks and swimming pools.

## ALLOWED SUPPORTS

Plasters - Concrete - Cement-based or lime-based mortars - Prefabricated concrete - Drywall - Plaster (gypsum) - Wood - Metal surfaces - Fiber-cement - Tiles - Floor screed - Rock walls - EPS - Polystyrene

## PREPARATION OF SUPPORTS

All surfaces must be free of contaminants and humidity less than 3%; it must offer a mechanical grip on a solid and non-yielding substrate. Where necessary, we recommend preparation using shot peening, bush hammering, sanding or hydrowashing. Consult personnel for correct preparation of the substrate. It is recommended to use primers from the SYNTECH POLIUREA PRIMER range and contact Azichem technical staff for clarification on the most suitable type to use.

## MODE OF USE

SYNTECH POLIUREA SPRAY - FR pure polyurea requires a bimixer system capable of producing pressure over 180 bar and temperatures over 65 °C. Contact Azichem technical staff for clarification on the best gun to use and on the details relating to the air system.




## APPLICATION METHODS



Two-components hot sprayer

## TOOL CLEANING

Thinner for resins

## KEY FEATURES

-  Dosage: 2.9 kg/m<sup>2</sup>
-  Shelf-life: 6 months
-  Use wearing protective glasses

- A:B** Mixing ratio: 1:1 (in volume) \_
-  Temperature of use: -10 / +70 °C
-  Use wearing protective gloves

## TECHNICAL SPECIFICATIONS

UNI EN 1542:1999  
Concrete adhesion (cutting test) > **1.5 MPa**

UNI ISO 34-1:2010  
Resistance to tearing **70 - 80 kN/m**

Walkability > **15 min**

EN ISO 6272-1:2013  
Impact resistance **Classe 1**

Access for traffic light > **9 h**

EN 1062-3:2008  
Permeability to water vapor **0.1**

UNI EN ISO 4624:2006  
Adhesion by direct traction > **0.8 N/mm<sup>2</sup>**

Complete hardening at 20°C > **24 h**

UNI EN ISO 868:2005  
Hardness **93 +/-5**

Gel time **8 s**

EN 13501-1:2005  
Reaction to fire **B s2 d0**

ISO 527-1:2012  
Longitudinal elongation at break **270 %**

Working temperature **-30 / +130 °C**

UNI EN ISO 5470-1:2001  
Resistance to abrasion < **100 mg**



## CONSUMPTION

Approximately 2.9 kg of SYNTECH POLIUREA SPRAY - FR for each square meter of surface to be covered.

## STORAGE AND CONSERVATION

Protect from freezing. Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Protect from humidity. Store the product at a temperature between +5°C and +35°C.

## WARNINGS AND PRECAUTIONS

See the safety data sheet to view complete data. Protect the materials from humidity and water.

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge.

Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage.

Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: [www.azichem.com](http://www.azichem.com). The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: [www.azichem.com](http://www.azichem.com).

It is forbidden to dispose of the product and/or packaging in the environment.

