

# ARKAZ POLYUREA HB1010

Economic hybrid polyurea system

## DESCRIPTION

**ARKAZ POLYUREA HB1010** is a very fast set, rapid curing, flexible, two component hybrid polyurea system. It is derived from a reaction of an isocyanate prepolymer and an amine terminated resin blend. It can be applied as an economic waterproofing and coating alternative to pure polyurea products. The material must be applied utilizing high pressure, heated plural component spray proportioning equipment, **ARKAZ POLYUREA HB1010** conforms the requirements of the EN 1504-2 standard (concrete surface protection system).

## USAGES

- General waterproofing under ceramic, screed concrete, marble and other floor coverings
- General waterproofing for light foot traffic areas like roofs, balconies terraces, walkways and public areas
- Waterproofing of ground concrete and load bearing walls
- Playgrounds and decorative applications
- On thermal insulation products for waterproofing (PU foam, EPS, XPS, etc)

## ADVANTAGES

- Economic alternative to pure polyurea products
- Fast reactivity and return to service time
- 100% solid, VOC free, no solvents
- Environmentally friendly
- Seamless coating
- Very good tensile and structural strength
- Excellent adhesion on concrete, steel, aluminum, plastics, fibers, wood, and foam
- Excellent crack bridging properties
- Variable application thickness possible

## TECHNICAL DATA

### ARKAZ POLYUREA HB1010

### Typical values

VOC Content (ASTM D1259)	0
Solid Content (ASTM D2697)	100%
Mixed Density @25°C (ASTM D1217)	0.99 – 1.03 g/cm <sup>3</sup>
Tensile Strength (ASTM D638)	15 N/mm <sup>2</sup>
Pull of Strength (ASTM D4541)	3 N/mm <sup>2</sup> Conc. 6 N/mm <sup>2</sup> Steel
Elongation at Break (ASTM D638)	350%
Shore A Hardness (ASTM D2240)	90 – 95
Abrasion Resistance (EN ISO 5470-1)	30 mg (H22, 1000 cycle)
Tack Free Time	15 – 30 seconds
Gel Time	5 – 10 seconds
Recoat Time	0 – 12 hours

## USAGE INSTRUCTIONS

### 1. Surface preparation

Concrete surfaces particularly if new; should be fully cured with a maximum residual moisture should be 6%, clean and free from contamination such as dust, oil, grease, organic growth, release agents and curing compounds.

Prepare concrete surfaces preferably by mechanical methods such as angle grinding to remove laitance, curing compounds and other loose materials to provide a mechanical key for **ARKAZ POLYUREA HB1010**. Relative air humidity for application should be lower than 85% prior to application.

After preparation, fill all blow holes and surface imperfections using **PIOREP** range or **PIOMORTAR** range as per recommendation.

### 2. Priming

Prior to the application of **ARKAZ POLYUREA HB1010** prime the prepared surface using **PIOPRIME 38**.

Apply **PIOPRIME 38** using a brush, roller or low pressure knap-sack sprayer to the prepared concrete surface at a rate of 9 m<sup>2</sup> per liter (100-micron coat). Allow the primer to become dry before applying **ARKAZ POLYUREA HB1010**. This is typically 18 hours post priming depending on temperature condition.

## ARKAZ POLYUREA HB1010

### Coverage

ARKAZ POLYUREA HB1010

1 kg/1m<sup>2</sup>/1mm thick

### 3. Application

Start spraying continuously the prepared areas without any interruption using a special polyurea high pressure spray proportioning machine for plural heated polyurea components of process temperature varies between 70-80 °C and 180-200 bar process pressure, following the usage instruction of the machine to avoid any material curing which may cause blockage of devise or hoses.

**ARKAZ POLYUREA AL1070** can be applied 1mm thickness as a top UV protective coat from discoloration over **ARKAZ POLYUREA HB1010**.

Minimum thickness recommended to achieve a strong and sound waterproofing is 2 mm.

## PACKAGING

**ARKAZ POLYUREA HB1010** is supplied in set, component A & B.

- **A** 225 kg (Isocyanate)
- **B** 200 kg (Amine)

## HEALTH & SAFETY

Before applying **ARKAZ POLYUREA HB1010** all safety protections should be worn during application, such as safety goggles and rubber gloves to avoid any harmful accidents, and for additional protection wear one-piece coveralls suit & a respirator to avoid inhaling any of the sprayed foam.

If **ARKAZ POLYUREA HB1010** is splashed to skin, it must be washed off by water and soap at once, and if to the eyes seek medical attention immediately.

### TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
concretedoctor@arkaz.com

### LEGAL DISCLAIMER

The information given is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification. Since the conditions of use are beyond our control, we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale including those limiting warranties and remedies which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would violate or infringe statutory obligations or any rights belonging to a third party.

These products may be covered by patents or patents pending.

## STORAGE & SHELF LIFE

Keep **ARKAZ POLYUREA HB1010** dry and in shaded place of a temperature range 20°C - 30°C, shelf life of the material is 9-months.



Copyright 2021  
Printed in K.S.A. Version 2.0  
13-March-2020