

MONNELI ARMATUREA A1

Aromatic Pure Polyurea

Product Description

A two component pure aromatic polyurea elastomer formulated for applications in concrete lining, corrosion protection and waterproofing. ARMATUREA A1 is designed to minimize problems associated with field applications and can be applied in the most problematic of ambient conditions since it is relatively temperature and moisture insensitive.

Uses

ARMATUREA A1 can be used as a protective, elastomeric membrane coating for applications in or on:

- Industrial facilities
- Cold storage facilities
- Warehouse floors
- Below grade waterproofing
- Parking garage decks
- Water and waste water treatment
- Food processing facilities
- Pulp and paper mills
- Tank linings
- Pickup truck bedlining
- Bottling & canning factories
- Walkways and balconies
- Secondary containment
- Mining operations
- Landfill containment
- Bridge deck underlays
- Water parks & theme parks
- Sprayed on urethane foam
- Geotextile linings foundation walls & sumps

Advantages

- Eco-friendly, zero VOC
- Flexible, excellent elongation
- Excellent thermal stability
- Good chemical resistance
- Excellent UV resistance
- Seamless, resilient, non-cracking elastomer
- Excellent corrosion protection
- Low perm rate
- Fast reactivity and cure time (No catalysts)
- Return projects to service in 60 minutes

Instructions for Use

Surface Preparation

All surfaces must be dry, smooth, clean, sound, The surface of the substrate shall be sound, clean and uncontaminated.

This preparation shall be such as to leave a sound expose surface free from dust, loose particles and any deleterious matter. If the surface is defective or has laitance, it must be cut back to a sound base.

New concrete or cementitious surfaces should be at least 28 days old and have moisture content not exceeding 5%. Old or existing surface should be refurbished mechanically to ensure clear and sound substrate.

Priming

Surface must be primed using UREAPRIME EP1. Once the primer has reached a tack-free status, the polyurea coating can be applied immediately. Note that the entire primed surface must be coated within the day of application.

Mixing

Use 1:1 ratio pump, with appropriate material heaters, as required for individual application. Please contact Colmef for further information.

Application

ARMATUREA A1 must be spray applied using approved equipment. For application guidelines, please contact Colmef.

Cleaning

Clean equipment immediately after use. Cured product may be disposed of without restriction. The un-cured isocyanate and resin portions should be disposed of according to local government regulations.

Applicable Standards

- ASTM D638
- ASTM D4060
- ASTM D2240
- ASTM D4541

Packaging

400 Liter Kit: 200 Liters of Part A and 200 Liters of Part B

Technical Data

Properties	Results
Solid content	100%
VOC	0%
Curing time	60 mins
Viscosity at 25°C	Comp A: 600 -800 mPa.s Comp B: 500-900 mPa.s
Density	Comp A: 1.02±0.02 kg/L Comp B: 0.98-1.02 kg/L
Tensile strength (ASTM D638)	>16N/mm ²
Elongation at break (ASTM D638)	>300%
Shore D hardness (ASTM D2240)	45±5
Rebound resilience (ISO 4662)	≥32%
Tear growth resistance (ISO 34-1 method A)	≥14 N/mm
Volume abrasion (DIN ISO 4649)	≤ 250mm ³
Taber abrasion (ASTM D4060)	<8mg (Wheel CS17/1.000g/1000cycles) <80mg (Wheel H18/1.000g/1000cycles)
Peel off strength on concrete (ISO 813)	≥4 N/mm
Pull off strength on concrete (ASTM D4541)	>1.5N/mm ²
Application temperature	-5°C to +50°C

All values are subject to 5-10 % tolerance

Colors

Standard colors are medium gray or black. Other colours available upon request.

Storage

ARMATUREA A1 should be stored in original, unopened factory containers, under normal storage conditions of 10° C to 30° C. In these conditions, product shelf life is 12 months from the date of production.

Health & Safety

All body parts should be covered and activated charcoal respirators or forced-air breathing apparatus are necessary for safe application of this product. Keep uncured product away from children at all times. All personnel should read and understand the safety recommendations stated in the Material Safety Data Sheet .

The information in this Technical Data Sheet is based on Colmef Monnelli's experience. Colmef Monnelli does not accept any liability arising from the use of its products as it has no direct or continuous control over where or how its products are applied. All Colmef Monnelli's Data Sheets are updated on regular basis. It is the user's responsibility to obtain the latest version.

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