

# ELASTOSEAL W



## PURE POLYUREA, HIGH ELASTIC, QUICK CURING, WATERPROOF COATING FOR POTABLE WATER APPLICATION

### DESCRIPTION

**ELASTOSEAL W** is a two-component, solvent free, flexible, quick curing, seamless, spray applied protective and waterproofing coating membrane. It is designed for use as anti-corrosion, waterproof, and protective coating for internal lining of potable water containment structures. It is also used in a variety of waterproofing applications, where a high degree of chemical and mechanical resistance is needed.

**ELASTOSEAL W** is specially formulated for use in potable water applications up to 85°C ambient temperature.

### RECOMMENDED USE

- Potable water storage tank, reservoir, canals and via duct
- Desalination Plants
- Rainwater storage tanks
- Water bottling and Cleaning plants
- Fish breeding tank etc.

### FEATURES & BENEFITS

- Approved for use in potable water containment structures
- Seamless, sprayed applied to any thickness in one application.
- Rapid curing
- Rain resistance after only 30 seconds
- Fast return to service time- within 48 hours
- Fast reactivity and tack free time- from 5 seconds
- Enhance the durability of reinforce concrete
- Excellent adhesion on concrete, steel, fiber glass, aluminum, foam, wood, etc.
- High abrasion and impact resistance
- Solvent free, VOC free and 100% solid content
- Flexible and does not brittle over a wide range of temperature
- High elongation

### TECHNICAL PROPERTIES

Chemical Base	Component A- Isocyanate Component B- Amine
Mixing ratio of Part A to Part B	1:1 by Volume

Material Consumption (kg/m <sup>2</sup> /1mm)	~1 - 1.2
Volume Solid, ASTM D2697	100%
Mixing ratio, by volume	1:1
Hardness ShoreD, ASTM D2240	40±5
Viscosity, ASTM D 4878 @ 25°C	Component A- 300- 800 cps Component B- 400-800 cps
Density, ASTM D 1217	Component A- 1.11 ± 0.02 Component B- 0.98 ± 0.02
Elongation, ASTM D412	≥400%
Tensile Strength, ASTM D412	>21 MPa
Tear growth resistance, ISO 34-1 method A	≥39 N/mm
Rebound Resilience (%), ISO 4662	≥38
Modulus, ASTM D412	@100% Elongation= >10 MPa @200% Elongation= >15 MPa @300% Elongation= >20 MPa
Volume Abrasion, DIN ISO 4649	≤180 mg
Taber Abrasion, ASTM D4060	<15 (Wheel CS17 / 1.000g / 1000 Cycles) <135 (Wheel H18 / 1.000g / 1000 Cycles)
Bond Strength to Concrete, ASTM D4541	>1.5 MPa
Bond Strength to Steel, ASTM D4541	>5 MPa
Peel off Strength to Concrete, ISO 813	≥4 N/mm
Peel off Strength to Steel, ISO 813	≥7 N/mm
Potable Water Approval	BS 6920, part 1-2014, WRAS

\***ELASTOSEAL W** is an aromatic based system and can display color shift under UV light exposure. However, this color shift will not negatively affect the products physical properties performance.

### COLOR

Dark Blue and Dark Grey

## PROCESSING REQUIREMENTS

Recommended Thickness	Min: 1.5mm Max: No Limit
Processing Temperature Part A Part B	70 - 80°C 70 - 80°C
Hose Temperature	70 up to 80°C
Spray temperature	70 up to 80°C
Spray Pressure Min	2500 Psi
Gel time	5-15 second @ 23°C (depend on the substrate temperature)
Tack Free	15-30 @ 23°C (depend on ambient temperature)
Over Coating (without any pre-treatment)	0-12 hours
Curing time @ 25° C	1 minute
Application temperature	5 up to 50 °C
Application Relative Humidity	98%
Antibacterial Activity, BS ISO 22196	2,2: Result "good" (99,0-99,9%) – (Bacteria: S.aureus)  2,4: Result "good" (99,0-99,9%) – (Bacteria: E.coli)
Shelf Life	Approximately 1 year
Storage Condition	10-30°C (in closed original drums, stored at dry and well-ventilated place; beware of freezing)

**Note:** Higher humidity levels do not prevent correct polymerization but may make adhesion increasingly difficult to substrates due to the potential for condensation on surface.

## APPLICATION NOTES

- **ELASTOSEAL W** can only be applied using high pressure heated plural component spray equipment.

### Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.

- If the ambient temperatures is below 15°C, chemical drums should be pre-heated using band heaters to 30 – 40°C.

Always mixed the Pigment into the B-side using a power stirrer.

- Prior to the commencement of spraying, The B-side component should be thoroughly power stirred and periodically stirred during the spraying process to ensure there is no settling out of the B-side chemical components.
- Both the A-side and B-side drums should be fitted with desiccant dryers
- Compressed air supply should be supplied via an air dryer.
- Primary heaters should be set at between 70-80°C. Adjustments can be made on-site based on environmental conditions, mixing module size and application circumstances.
- Hose heaters should be set at 70°C. Adjustments can be made on-site based on environmental conditions, mixing module size and application circumstances.
- For the application of potable water tanks reservoirs and similar structures: After the finalization of the application of **ELASTOSEAL W** a waiting time of 24 hours should be considered. Then an intensive through washing and rinsing of the tank with warm water (50-60°C) is indicated and then this water can be removed prior to filling tank with potable water

## SAFETY AND HANDLING

- We recommend the used of highly trained CMCI applicator for this type of application. All Applicators should have a suitable equipment and expertise and will follow the procedures detailed in this datasheet and in the CMCI Polyurea Method Statement
- Spray applicators must be wearing appropriate PPE including approved breathing equipment, eye wear, Nylex or similar light weight spray suit and appropriate covered footwear.
- Avoid breathing in vapors during spraying or when handling chemicals.
- Avoid eye and skin contact.
- Store chemical drums in a cool dry environment. Avoid storing chemicals for long periods in direct sunlight.
- Do not store chemicals next to food stuffs.
- Ensure chemical drums are kept tightly sealed and avoid ingress of air and moisture.

TSS/TDS/140422-C

### "High Quality Construction Chemicals"

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