

**Waterproofing Systems / MS Polymers**

# POLYMERA® MS

## MS Polymer Based Liquid Membrane

Tested by METU Chemical Engineering Department to BS 6920 Standard.  
 Report No: 2014.03.04.866/01

### DESCRIPTION

Single component, semi-fluid, ready-to-use, high technology coating and waterproofing material, produced with **MS Polymer** hybrid technology. It does not contain solvent and isocyanate. Resistant to UV.

**POLYMERA MS** is a medium viscosity product used in covering and repairing cracks up to 5 mm on horizontal and vertical surfaces

### APPLICATION AREAS

- Indoor and outdoor,
- Waterproofing, flexible bonding and local repairs of vertical and highly inclined surfaces,
- On almost all kind of mineral surfaces, such as concrete, stone, marble, ceramic, tile, all kinds of wood, glass, metal, tile, brick, betopan, aerated concrete, and their combinations,
- Balconies, terraces or inclined roofs where waterproofing is required, on wood and metal surfaces, in intersections of chimneys, ventilations and skylights,
- Wet areas such as bathrooms and kitchens
- Places below ground level, such as foundations, garage and basements, against non-pressurized water and ground moisture.

### TECHNICAL PROPERTIES

<b>Appearance</b>	Medium viscosity elastomeric liquid coating
<b>Color</b>	Pls. see the color chart
<b>Density</b>	1.47 ± 0.05 kg/L
<b>Application Temperature</b>	Between +5°C and +35°C
<b>Hardness (Shore A)</b>	50 ± 5
<b>Bond Strength by Pull-off</b>	≥ 2.0 MPa (EN 1542)
<b>Elongation at Break</b>	> 200% (7 days)
<b>Capillary Absorption and Water Permeability</b>	w < 0.1 kg/(m <sup>2</sup> .h.0.5) (EN 1062-3); 0.018 kg/(m <sup>2</sup> .h.0.5) (TS 4045)
<b>Film Formation Time</b>	100 ± 30 minutes
<b>Curing Rate</b>	3 mm / 24 hours
<b>Service Temperature</b>	-30°C / +80°C

### ADVANTAGES

POLYMERA MS is an **MS Polymer** based product with high technical qualifications, developed with Japanese technology. **MS Polymer** technology has important advantages compared to existing polyurethane, silicone, bitumen or cement-acrylic based coatings:

- **Does not contain solvent and isocyanate** which are harmful to human health and to the environment.

- **Has 100% elastomeric composition**, does not shrink as it does not contain solvent.
- **Resistant to UV**, does not crack, sag or turn to yellow. Can be safely used outdoor.
- Bonds even on **damp surfaces, provides high adherence**.
- Is not harmful to human health and to the environment thanks to its **low VOC** values. Almost odorless.

- Easily and quickly applied with a spatula, trowel or comb. Does not form seams.
  - Overpaintable.
  - **Very flexible.** Can cover and fill the cracks up to 5 mm. Keeps its elasticity and bonding properties
- in joints and cracks caused by the movements of the buildings. Turns to its original form perfectly.
- Protects its elasticity even in low temperatures, after being cured.

POLYMERA MS is a new generation product which offers all these advantages in a single product

## CONSUMPTION

1.40 - 1.50 kg/m<sup>2</sup> for approximately 1 mm thickness in each layer. (Varies depending on the application area, roughness and absorption of the surface.)

## APPLICATION

### PREPARATION OF THE SURFACE

- The surface must be clear of materials that prevent adhesion such as dust, oil, tar, paint, silicone, curing material, detergent and mold oils.
- Repair the weak parts of the concrete, remove the plasters that are not well adhered; the surface must be sound and solid. Repair the static cracks in the building with a plaster with **AQUALATEX** or **REPAIRGROUT EXPAN High Strength Shrinkage-Free Grout Mortars**. Fill the dynamic (moving) cracks with FIXA's appropriate MS, hybrid or polyurethane sealants. Block water incoming holes with **AQUASTOP**.
- Under normal conditions, the use of primer is not required. However, if the surface is dusting or excessively wet, prime with **POLAN A Polyurethane Floor Primer**. Apply the product within 6 - 18 hours after priming.

### APPLICATION

- POLYMERA MS is ready to use. Do not dilute or add any external substance. Mix before use.
- Cut the aluminum packaging of POLYMERA MS from the top corner in a triangle shape with scissors and pour directly onto the surface. Apply with a spatula, flat or notched trowel.
- If POLYMERA MS is used for repairing or bonding, apply a single layer. If it is used as a liquid membrane, wait between 6 - 12 hours after the application of the first layer.
- Apply the second layer when the first layer is walkable. In deep cracks that may collapse after the first layer, apply the second layer within 12 - 24 hours.
- For a smooth finish at the borders, surround the application area with masking tape. Remove the tape in 5 minutes after application.
- The area can be open for use in 24-48 hours, final curing takes place after 7 days.

### CAUTION

- Avoid application at temperatures below +5°C and above +35°C.
- There are 2 aluminum packages of 7 kg each in the 14 kg product. The reason for two identical packaging is to prevent the product from being cured rapidly during application. The packages are designed for single use. Use the product completely within the specified duration when opened.
- Do not add water or thinning solvent to the product.
- After the application, protect the surface from water, rain, dew, frost and snow until it is completely dry.

### PACKAGING

1 kg tin cans, 7 kg plastic buckets (7 kg aluminum foiled package)  
14 kg plastic buckets (2 x 7 kg aluminum foiled packages).

**SHELF LIFE**

Unopened packages can be stored for 12 months between +10°C and +25°C, in a dry environment protected from sunlight, with maximum of 3 layers.

**HEALTH AND SAFETY**

As with all chemical products, avoid contact with food products, skin, eyes and mouth during use and storage. During the application, use work clothes, protective gloves and glasses in accordance with the occupational and worker health rules. Consult a doctor if accidentally swallowed. In case of contact with skin, rinse with water. Do not leave the cover open. Store out of the reach of children.

The application instructions and technical values given for the products have been obtained in accordance with our tests and experiences in accordance with international standards at 23±2°C temperature and 50±5% relative humidity conditions. These values may vary depending on ambient conditions. High temperatures shorten the times, low temperatures lengthen them. Before starting the application, the user should test whether the product is suitable for the application and purpose. FIXA Yapı Chemicals San. Trade Ltd. Sti. is not responsible. This Technical Data Sheet remains valid until the next revision is published. FIXA reserves the right to change the values specified in this Technical Data Sheet, provided that the new version is published. It is the user's responsibility to check that the document is up-to-date. Please contact our sales department for more information.