

Waterproofing Systems / MS Polymers

POLYMER[®] MS

MS Polymer Based Liquid Waterproofing Membrane

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

DESCRIPTION

Single component, semi-fluid, ready-to-use, solvent and isocyanate free, UV resistant, high technology coating and waterproofing material, produced with **MS Polymer** hybrid technology.

POLYMER 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 kinds of mineral surfaces, such as concrete, stone, marble, ceramic, tile, all kinds of wood, glass, metal, tile, brick, cement-bonded particle board, gas 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, garages and basements against non-pressurized water and ground moisture.

TECHNICAL PROPERTIES

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

ADVANTAGES

POLYMER 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 at low temperatures, when cured.

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

CONSUMPTION

1.40 - 1.50 kg/m² 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 bonding, such as dust, oil, tar, paint, silicone, curing materials, detergents and mold oils.
- Repair the weak parts of the concrete, remove poorly adhered plasters; make the surface 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. Seal any areas of water ingress with **AQUASTOP**.
- Under normal conditions, there is no need for primer. 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

- POLYMER MS is ready-to-use. Do not dilute or add any external substance. Mix before use.
- Cut the aluminum packaging of POLYMER 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 POLYMER MS is used for repairing or bonding, apply a single layer. If it is used as a liquid membrane, wait 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 in the 14 kg bucket. The packages are identical. The reason for separate packaging is to prevent rapid curing of the product during application. The packaging is designed for single use. Once opened, it is recommended that the product be fully consumed within the specified time.
- 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

Expires in 12 months. Store unopened packages between +10°C and +25°C, in a dry environment. Protect from sunlight, stack up to 3 packages on the pallet.

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 Construction Chemicals Ltd. 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.