

# Mandana Polymer Industrial Group

Manufacturer of Liquid waterproofing membrane Epoxy Adhesive, Epoxy Flooring part making epoxy & Polymer Detergent



## Polyshot (OP): Polymer reinforcement for stone and soil structures

Using concrete and stone walls or shotcrete is a common but expensive way to prevent erosion and collapse in stone-soil structures and trenches. A more cost-effective method used worldwide involves applying sprayed and durable polymers, which are much cheaper. Our company is the first and only one in the country to produce and successfully implement this product, earning approval from known Khak laboratories

Feature	Application
<ul style="list-style-type: none"> <li>● ore affordable than shotcrete (sprayed concrete)</li> <li>● Requires fewer tools and equipment</li> <li>● Water and sunlight resistant</li> <li>● Excellent adhesion to concrete, stone, and soil surfaces</li> <li>● Highly resistant to chemicals</li> <li>● UV protection</li> <li>● Long lifespan</li> </ul>	<ul style="list-style-type: none"> <li>● Improving the strength and adhesion of mineral structures and trenches against wind erosion</li> <li>● Boosting the strength and adhesion of mineral structures to protect against moisture and chemical erosion</li> <li>● Strengthening and waterproofing natural and artificial stones</li> <li>● Protecting stone facades</li> <li>● Filling and repairing pores and cracks in stone</li> </ul>

### Consumers (end users)

- Shotcrete specialized contractors
- Shotcrete service providers
- Soil testing laboratories
- City governments
- Road and transportation departments



### Physical and chemical characteristics of polyshot

Procedure	<b>Preparation and Tips Before Starting</b> <ul style="list-style-type: none"> <li>● Clean the surfaces before applying polyshot</li> <li>● Avoid using polyshot when temperatures are below 15°C or on rainy days</li> </ul> <b>Polyshot Application Steps</b> <ul style="list-style-type: none"> <li>● Start with the polyshot primer</li> <li>● Apply a second layer of reinforced polyshot fibers over the primer</li> <li>● Finish with a third layer of colored polyshot on the reinforced fibers</li> </ul>		
Optimal operating temperature range	15-25°C		
Amount of coverage	2-3m <sup>2</sup> /1kg material		
Implementation equipment	Spatula, roller, brush		
Nature of product	Viscous liquid (single component)		
Density (25°C)	1/20gr/cm <sup>3</sup>		
Viscosity (25°C)	2100mPa.s		
Volume percentage	52%		
Flammability	inflammable		
PH	9		
Curing time	Touch cure		Full cure
	3-4h		24h
The number of application layers	First layer PRIMER	Second layer Reinforced lace	Third layer Colored Polyshot
Packaging (kg)	4,10 and 25		

### Polyshot technical specifications

Temperature resistance	-50to +120°C
UV stability	Stable
Protecting microstructure cracks	Fully protected
Protection against corrosion and wear of the structure	Fully protected
Resistance to water penetration	Fully resistance
Environmentally friendly	Environmentally friendly and non-polluting

### Maintenance and safety considerations

- Store in a dry place away from sunlight, water, and rain
- Keep at temperatures above 15°C
- In the primary packaging, the storage period at 15-30°C is more than 6-12 months
- The polymer stabilizer is safe but wear gloves and protective clothing when using it. If it gets in your eyes, wash them out with water

### Warranty and After-Sales Service

This product comes with a one-year performance guarantee and ten years of after-sales service