



One component, water based/solvent free, elastomeric Polyurethane Bitumen waterproofing liquid.

- High elastomeric behavior
- Excellent adhesion on porous surfaces
- Fast drying
- Resistant to ponding water
- ◆ Thixotropic
- Long service life
- ♦ High resistance to wear
- High crack bridging ability
- (VOC content <50g/lt)</p>



### **GENERAL DESCRIPTION**

**ESHAPOLYBLACK** is a new generation water based/ solvent free, polyurethane bitumen waterproofing liquid for vertical and horizontal surfaces waterproofing applications. After polymerization it forms a continuous seamless waterproofing elastomeric membrane.

It's advanced chemical formula grants unique properties such as : very good adhesion without primer use on most common construction surfaces (such as concrete, cement screeds, steel or wood surfaces, gypsum / cement boards and other bituminous surfaces). It is a fast curing/drying and bubble free coating.

Its main use is for long term waterproofing and protection for all construction elements. Can be used in areas where ponding water may exist. It exhibits high mechanical strain resistance & gap bridging ability for craks up to 3,0mm width.

#### **APPLICATION FIELDS**

Recommended for waterproofing and protection (fulfils EN 1504-2:2004) of:

- Basements underground vertical walls & foundations.
- Wet areas (bathrooms, under tile).
- Roofing.
- Non potable water tanks & irrigation channels.
- Ponding water areas.
- Gypsum & cement boards.
- As vapor barrier
- Bituminous waterproofing membranes rejuvenation and repair.

- \* In case of EshaPolyblack is used as waterproofing layer at exposed to the sun areas, the use of an additional resistant to UV resistant layer such as: ESHACRYCOAT or ESHAHYBRID or ESHALUMIN is highly recommended.
- \* \* ESHAPOLYBLACK cannot be used as primer for bituminous waterproofing membranes torch or cold application.

## STORAGE

**ESHAPOLYBLACK** can be stored for at least 12 months in the original sealed pails. Store in a dry protected environment, at storage temperatures from  $+5^{\circ}$ C to  $+35^{\circ}$ C. Do not expose to heat sources. When opened product has to be applied.

### **PACKING**

In 17 kgs plastic pails.

# **COMPLIANCE - CERTIFICATION**

The product is CE certified according to the European Standard EN:1504-2:2004.





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# **APPLICATION PROCEDURE**

#### **WEATHER CONDITIONS**

Avoid rainy – frost weather. Application temperature window is from  $+5^{\circ}$ C to  $+35^{\circ}$ C.

#### SURFACE PREPARATION

Surfaces should be regular, free from loose particles and dust, clean from oils and foreign matter. Blow with compressed air if necessary or high pressure water jet. Application on rigid dry surfaces.

Concrete existing cracks should be first repaired with polyurethane one component sealant **ESHAPOLYSEAL** 1K. Primer use is not necessary. If needed, **ESHAPOLYBLACK** diluted with 15%-20% water can be used.

#### APPLICATION

Gently stir before application until homogeneous mixture is formed. Prolonged or/and fast stirring may result to air entrapment.

**ESHAPOLYBLACK** can be applied with roll, or spayed with airless gun (10% dilution with water) in 2 or 3 successive layers. To maximize the resulting waterproofing membrane and mechanical strength apply on fresh **ESHAPOLYBLACK**, a layer polyester reinforcement **ESHATERRA 50**, especially where intense concrete cracking is abundant or at vertical/horizontal wall corners.

Each **ESHAPOLYBLACK** layer is applied when previous layer has been dried. Waiting time between 2 successive layers should be at least 2-3 hours and not more 48 hours. Curing time depends from environmental temperature & humidity.

### CONSUMPTION

1)Vertical or horizontal surface waterproofing, total consumption of 1,0-1,2 kg/m² in 2 layers is recommended and depended on epending application surface porosity. Don't apply in single thick layers of 1,0 kg/m² to avoid air entrapment.

**2)Under tile waterproofing:** When **ESHAPOLYBLACK** is still fresh, apply dry quartz sand (0,3-0,8mm) with a consumption of 2 kg/m<sup>2</sup>.

#### **CURING TIME**

Full product curing is expected in 5-7 days depending to weather and environmental conditions

#### **TOOLS CLEANING**

Tools are cleaned with water before the emulsion has dried or with gasoline in case it has already dried.

## **PRECAUTIONS**

May cause damage to organs through prolonged or repeated exposure. Keep out of reach of children. Use of appropriate Personal Protection equipment during application (protective gloves/protective clothing/eye protection/face). Do not breathe dust/fume/gas/mist/vapours/spray — use respiratory protection in closed spaces. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. IF ON SKIN:Rinse skin with water [or shower] — European Emergency Tel.: 112

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### FOR PROFFESIONAL USE ONLY.

For more information please refer to the material's MSDS from Esha sales department and read carefully the product's plastic pail label.





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# **TECHNICAL CHARACTERISTICS**

PROPERTIES	NOMINAL VALUE	TEST METHOD	UNIT
Color	Black		
Tack free time	3		h
Density	1,012±3%		g/cm³
Elongation at break	>200	DIN 53504	%
Hardness SHORE-A	45-55	ISO 868:2003	
Bonding stength on cocrete without primer	≥ 0,8	EN 1542:1999 pull out test	N/mm²
Sevice temperature after curring	-10 to +50		°C
Application temperature	+5 to +35	EN 1504-2	°C
Fire classification	Euroclass F	EN 13501-1	
Water absorption	< 4	After immersion 48h, 25°C	% by weight
Permeability to CO <sub>2</sub> , S <sub>D</sub>	165	EN 1062-2:2018	m
Permeability to water vapor, S <sub>D</sub>	2.3	EN ISO 7783:2018	m
Liquid water permability, W in 25°C, Rh=55%	0,063	EN 106-32:2008	kg/(m <sup>2</sup> .h <sup>0,5</sup> )
Impact resistance	≥10	EN ISO 6272-1:2011	Nm
Gap bridging ability	≥ 3mm	EN 14891:2007 § A.8.2	mm

Tolerances in the nominal values are in accordance with respective standards. Producer reserves the right to modify the properties of his products.

The information contained in this leaflet is, to the best of our knowledge, true and reliable and is supported by the present state of our knowledge. According to the care taken and the method of application, upon which we have no influence, the values are subject to divergence. Therefore for best results, prior to use, an application test should be made by the user under his own processing conditions.

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