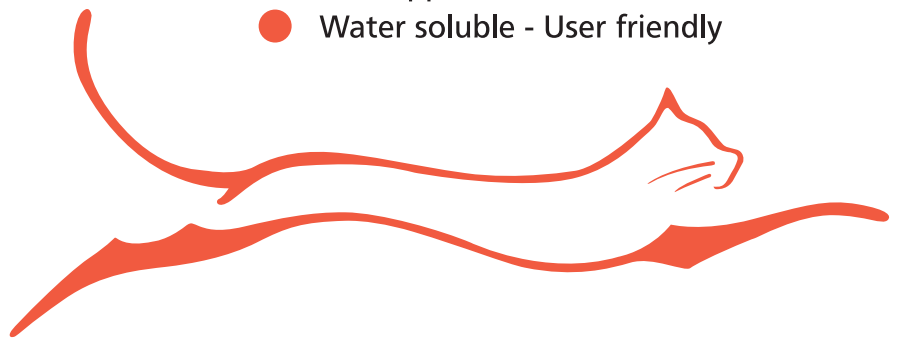


# Elastic and Fast!



- Perfect Adhesion
- Unique Elasticity
- Excellent Waterproofing and Resistance to Aging
- Fast Application
- Water soluble - User friendly



**EshaElastic**

WATERPROOFING HYPER-ELASTIC BITUMINOUS EMULSION



# Esha Elastic

## WATERPROOFING HYPER-ELASTIC BITUMINOUS EMULSION

### GENERAL DESCRIPTION

ESHAELASTIC is a high grade, elastic waterproofing bitumen based emulsion. It is composed of purified bitumen, synthetic elastomers, resins, and anti-stripping agents. When dry, it forms a continuous elastic film that shows excellent adhesion to most common structural elements and is resistant to UV radiation, despite its black color. Because of its unique elasticity (1200%) it exhibits excellent crack-bridging properties (1,2).

### APPLICATIONS

ESHAELASTIC is an excellent material for the following applications:

- Waterproofing of flat roofs (3), balconies, side walls (4), basements and generally concrete surfaces.
- Regeneration of old bitumen layers (2). ESHAELASTIC, when applied on top of old bitumen layers, forms a final elastic and continuous film that seals any existing cracks and in the mean time stabilizes the mineral protective top finish.
- Surface-Primer for the adhesion of bituminous membranes (5). ESHAELASTIC has unique advantages compared to bituminous varnishes in this application. While being water soluble, meaning easier and friendlier to use, it is as efficient and quick to use as a bituminous varnish.
- Adhesion of thermo-insulating materials.
- Vapour barrier

ESHAELASTIC is compatible with concrete, light weight concrete, asbestos-cement, brick, stones, wood, metal, plasterboard, polystyrene and polyurethane.

### INSTRUCTIONS FOR USE

- **Surface Preparation:** Surfaces should be regular, dust free, clean from oils and foreign matter. ESHAELASTIC can be applied on a damp (not wet) surface.
- **Application:** ESHAELASTIC must not be applied when the temperature is below 5°C.

#### A. WATERPROOFING OF SURFACES/ REGENERATION OF OLD BITUMINOUS SURFACES

ESHAELASTIC is cold applied in at least two layers by brush (3), roller (2) or spray gun. Each new layer is applied in a criss-cross pattern with respect to the previous one, when the latter is dry, in order to avoid entrapment of water in-between successive layers. For the same reason one thick layer should be avoided. Reinforcement (e.g. fiberglass) may be used between two successive layers to increase the mechanical properties of the final film. ESHAELASTIC is resistant to UV radiation. However, when used for waterproofing of exposed surfaces, it is recommended to finish the surface with a protective layer of a bituminous aluminium paint (ESHALUMIN), which functions as solar reflective barrier and protects the roof from unnecessary overheating.

#### B. PRIMING FOR APPLICATION OF BITUMINOUS WATERPROOFING MEMBRANES

Adhesion of bituminous membranes by means of a torch, on a pre-coated surface with ESHAELASTIC, should start only after all the water content has evaporated. In practice this means max 1 hour in summer time and 2-3 hours in winter time, depending on weather conditions (temperature and moisture content).



1



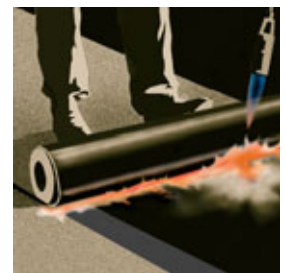
2



3



4



5

### PRECAUTIONS

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- In liquid form it pollutes the water. It should not be disposed to the ground but should be treated according to the relevant regulations.

- **Consumption:** For concrete surfaces it is recommended to dilute ESHAELASTIC with water up to 15-20% in the first layer. If dilution is needed in subsequent layers then 10% is recommended. In both cases consumption ranges between 0.3-0.5 kg/m<sup>2</sup> per layer, depending on the surface type and porosity.
- **Cleaning of Tools:** Tools are cleaned with water before the emulsion has dried or with gasoline in case it has already dried.

### STORAGE

Stored in protected areas where temperature is maintained above 0 °C. Preserved in sealed containers for over a year.



- Packaging
- Pails of 17 kg
  - Drums of 170 kg

## TECHNICAL CHARACTERISTICS

	PROPERTIES	NOMINAL VALUE	TEST METHOD
General Properties	Physical appearance	Viscous liquid	Observation
	Color	Black	Observation
	Density	0.95 +/- 0.05 g/cm <sup>3</sup>	ASTM D-1475
	% Residue by evaporation	55-60 %	By Evaporation
Properties of Dry Film	Flash Point of dry film	≥ 200 °C	ASTM D-92
	Softening Point of dry film	> 85 °C	ASTM D-36
	Elongation	> 1000 %	ASTM D-412
	Water absorption	≤ 0.05 %	AASHTO T-238
	Water pressure resistance	≥ 0.15 Mpa	DIN 16726
	Touch free time	< 3h	Observation
	Flow resistance at 100 °C	≤ 1mm	DIN 52123
	Cold bending flexibility	≤ -15	DIN 52123
	Natural aging		Weathered outside for 1500h
	- Initial Elasticity %	≥ 1280%	
	- Change in Elasticity %	≤ 2.5 %	
	Impact resistance	No crack	ISO 6272
	- Falling height 300mm, 0 °C		
	- Falling height 200mm, 20 °C		
	Gap Bridging under pressure (0,5 bar, 8h, 3mm thick)	No leakage	AIB 1.997 Annex III Column 5
- Gap 3mm, 0 °C			
- Gap 3mm, 20 °C			
Concrete adhesion		ASTM D-429	
- Cured for 1 day at 70 °C	> 0.15 N/mm <sup>2</sup>		
- Cured for 7 days at 70 °C	> 0.20 N/mm <sup>2</sup>		
- Cured for 28 days at 70 °C	> 0.25 N/mm <sup>2</sup>		

Tolerances in the nominal values are in accordance with respective standards.

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When dry, ESHAELASTIC forms a continuous elastic film that does not shrink neither becomes brittle and retains its elasticity in a wide temperature range (-15 °C to 90 °C). It is not affected by weak acid and alkali solutions, or common chemical substances contained in the soil. It is affected by mineral oils.

Directions given on or in the packages or containers will always prevail.

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 in his own environment.



EN ISO 9001:2000  
EN ISO 14001:2004

Member of



The ultimate  
waterproof world

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