# ARKIFLOOR EH





## PRODUCT DESCRIPTION

**Arkifloor EH** is a color pigmented, two-component epoxy floor coating system. It is designed for light to medium-grade traffic and corrosion control environment. **Arkifloor EH** displays good adhesive properties, and excellent resistance against chemicals on well prepared cementitous substrates.

The gloss finish of **Arkifloor EH** retards the growth of mould and fungus commonly found on substrates. Its smooth, hard surface prevents the development of dust from abrasion and easy for maintenance. With broadcast of silica sand, a textured effect with anti-slip coating can be produced.

**Arkifloor EH** is particularly suitable for storage areas, AHU rooms, walkways, lobby floors, stairways, balconies, corridors, as well as vicinities of industrial, trading and commercial building areas with light mechanical loads.

**Arkifloor EH** comes in a wide range of colors for your flooring needs. For standard colors, please refer to our Color Chart. Special color requests are available on request.

### **FEATURES**

- Excellent resistance to a wide range of chemicals and oil spills
- Dust-proofing capability, reduces floor maintenance
- · Strong and durable with seamless finish
- Excellent impact and abrasion resistance for light to medium vehicular movement
- Easy mixing and application at site
- Enhances the appearance of the indoor environment
- · Retards the growth of bacteria and mould
- Non-slip finish available

# PHYSICAL PROPERTIES

Color	Wide range	
Finish	Gloss	
Film Thickness	Wet Film: 250 microns Dry Film: 100-150microns	
Flash Point	10°C	
Loading Capacity (30°C)	Surface Dry : 8 hrs Fully Cured : 7 days	
Pot Life (30°C)	Approx. 30 mins	
Volume Solid	87 ± 3%	
Shelf Life (in sealed container)	Up to 12 months if stored in tightly sealed containers. Keep under roof and in cool place.	
Specific Gravity	Approx. 1.5	

#### **TECHNICAL PROPERTIES**

DESCRIPTION	2.5 N/mm <sup>2</sup>	
Adhesion Strength JIS A 6909 5.5		
Abrasion Resistance JIS K 5400 8.9		
Anti-slip Coefficient JIS A 1407	0.26	
Hardness Shore D Hard Scale	83	
Impact Resistance JIS K 5400 8.3.2 Dupont test: Dropping 500g of steel ball from 50 cm height	No peeling / cracks	
Tensile Strength and Elongation to Break ASTM D882:92a	13.05 N/mm <sup>2</sup>	
Odor	Low	
Thermal Resistance Approx. 50°		
Toxicity	Physically safe	

## SURFACE PREPARATION

#### Concrete Substrate

Concrete surfaces should be well cured and free from dirt, dust, oil, grease and foreign matters. Any unsound substrates, cracks, and pot-holes should be made good with the appropriate SKK filler product.

Concrete is highly susceptible to uprising moisture, which can decrease the effectiveness of any coating system. Installation of a water-proofing membranes mandatory to prevent glitches in the dynamics of any coating system. Smooth concrete surfaces may have to be chemically cleaned or mechanically scarified to provide bonding keys before the coating can be laid. Etching neutralizes the alkaline surface and provides a better bond. It also helps remove salt deposits or laitance that can occur on concrete surfaces.

## Masonry and Mortar Substrate

Masonry surfaces may peel due to efflorescence, where soluble salts are present. It is therefore essential to treat the surfaces free from dirt, dust, oil, grease and foreign matters. Environmental determinants like humidity can also cause structural or superficial cracks with mortar.

Restoration work should be carried out to amend these problems prior to the application of paint. If efflorescence is also evident, it must be removed before repainting. Remove

all flaking or chalking paint from the damaged area by wire brushing or sandblasting. If surface is very porous, apply SK Floor Filler, an epoxy resin-based cementitious conditioner to mend the surface.

## **APPLICATION PROCEDURES**

MIXING

Mixing Ratio (by weight ratio)				
Base	Hardener	Thinner		
100	25	5-15%		

Base and Hardener should be individually mix using a heavy duty, slow speed drill with proprietary mixing paddle attachment to disperse any <u>settlement</u> which may occur during transportation or storage. Then the two should be mixed thoroughly to a homogenous mix and follow by application of either roller or airless spray. Dilute the mixture with EH Thinner

The hardener will vary in colour between clear to deep amber tone. This colour parameter will not impact the cured performance of this product.

#### **APPLICATION**

Ensure that substrate surface is cleaned prior to priming. Apply one coat of **SK Arkiprimer** and two coats of **Arkifloor EH** over the substrate by roller or brush. After allowing adequate curing, the surface should be inspected for runs, foreign matter and under cured areas. Do not apply **Arkifloor EH** at temperature below 10°C.

Coverage		
	0.20 - 0.25kg/m²/coat 0.4 - 0.5kg/m²/2coat	
Per Coat	0.4 - 0.5kg/m <sup>2</sup> /2coat	
	4 - 5m <sup>2</sup> /kg/coat	
	2.0 - 2.5m <sup>2</sup> /kg/2coat	
Overcoating Interval	8 hrs, max 3 days	
No. of Coat	2	

## PACKING STYLE

Arkifloor EH (20 kg/set)		
Arkifloor EH Base	16 kg/can	
Arkifloor EH Hardener	4 kg/can	

## **MATERIAL HANDLING**

Always wear the appropriate safety goggles, breathing protection, clothing and gloves during the handling of epoxy resins and hardeners. Work with adequate ventilation during application. Any sources of ignition should be eliminated and only use equipment incorporated with explosion protection. Do not smoke. Store all materials in a cool, well-ventilated and dry place, away from direct sunlight. Properly dispose all used containers and excess materials in accordance to the local governing safety rules and regulations.

Store material away from excessive heat and high humidity.

**CHEMICAL RESISTANCE** 

Resistance to splash or spillage of industrial chemicals at ambient temperatures	No Degradation	Slight Degradation/ Discoloration
INORGANIC ACIDS		
50% Sulfuric Acid	<b>*</b>	
37% Hydrochloric Acid	*	
50% Nitric Acid		<b>*</b>
50% Phosphoric Acid	+	
ORGANIC ACIDS		
10% Lactic Acid	<b>+</b>	
5% Formic Acid	+	
10% Acetic Acid		<b>*</b>
ALKALINE		
30% Calcium Chloride	<b>+</b>	
20% Potassium Chloride	+	
Saturated Calcium Hydroxide	<b>+</b>	
25% Ammonia	+	
50% Sodium Hydroxide	<b>+</b>	
10% Sodium Hypochlorite	+	
ORGANIC SOLVENT		
Methyl Alcohol	<b>+</b>	
Toluene	<b>+</b>	
Petrol	+	
AQUEOUS SOLUTION		
Water	<b>+</b>	
Sugar Solution	<b>*</b>	
10% Sodium Chloride	<b>*</b>	

## **CLEANING**

Tools must be cleaned immediately after use with SKK Thinner

#### **SAFETY PRECAUTIONS**

This product contains volatile and inflammable solvents and must not be used near flame or welding operations. Avoid contact with skin or eye. Any skin or eye contamination should be washed immediately with plenty of water and seek medical treatment. If swallowed, do not induce vomiting. Contact a physician immediately.

\*Epoxy material in nature is poor in UV and Light resistance. It tends to discolor (amber/yellow) rapidly upon exposure to UV and Light and even with indoor applications, Therefore, Epoxy coating in white color is not advisable for selection.

### Disclaimer:

\* For dark and premium colour, additional coats may be required to achieve uniform finish. Site mock-up is recommended to confirm the required numbers of coats prior to actual application of work.

The technical information given herein is of a general nature and correct to the best of our knowledge based on laboratory tests and professional experiences. It shall not to be construed as implying any guarantee of performance. Due to unforeseeable conditions and constraints, we will not assume liability for the unsuccessful use of this product. We reserve the right to alter or modify any data given without prior notice. When in doubt, please consult our technical department for further information.