

# ARKIFLOOR EHS

Two-component, solvent free, epoxy floor coating system



## PRODUCT DESCRIPTION

Arkifloor EHS is a two-component, solvent-free floor coating system designed specially for corrosion control against medium-duty vehicular movement. Its high gloss finish retards the growth of mould and fungus commonly found on substrates. The uniform and hard surface provides easy maintenance to keep your indoor environment more dust-free and hygienic. With the addition of silica sand, an anti-slip surface is produced with an excellent coefficient of slip resistance.

Arkifloor EHS is appropriate for application on both old or new cementitious surfaces of industrial and commercial laboratories, food processing factories, manufacturing factories, walkways, warehouses, workshops, cold rooms, breweries, power plants, wafer plants, and chemical storage rooms. Arkifloor EHS comes in a wide range of colors for your flooring needs. For standard colors, please refer to our Color Chart.

## FEATURES

- Excellent resistance to a wide range of chemicals and oil spills
- Low odor, Dust-proofing capability, reduces floor maintenance
- Strong and durable with seamless finish
- Excellent impact and abrasion resistance for medium vehicular movement
- Retards the growth of bacteria and mould
- Non-slip finish available

## PHYSICAL PROPERTIES

Color	Wide range
Finish	Gloss
Film Thickness	Wet Film : 350 microns Dry Film : 350 microns
Flash Point	176°C
Loading Capacity (30°C)	Surface Dry : 8 hrs Fully Cured : 7 days
Pot Life (30°C)	Approx. 30 mins
Volume Solid	Above 99%
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. 1.3

## TECHNICAL PROPERTIES

DESCRIPTION	RESULTS
<b>Adhesion Strength</b> JIS K 5400 8.7	2.5 N/mm <sup>2</sup>
<b>Abrasion Resistance</b> JIS K 5400 8.9	30 mg
<b>Hardness</b> Shore D Hard Scale	83
<b>Impact Resistance</b> JIS K 5400 8.3.2 Dupont test : Dropping 500g of steel ball from 50 cm height	No peeling / cracks
<b>Odor</b>	Low
<b>Thermal Resistance</b>	Approx. 50°C
<b>Toxicity</b>	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 membrane is 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
100	25

Base and Hardener should be individually mix using a heavy duty, slow speed drill with proprietary mixing paddle attachment to disperse any settlement 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. Do not allow material bonding.

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 EHS** 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 EHS** at temperature below 10°C.

Coverage	
Per Coat	0.20 - 0.25kg/m <sup>2</sup> /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 EHS (20 kg/set)	
Arkifloor EHS Base	16 kg/can
Arkifloor EHS 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
<b>INORGANIC ACIDS</b>		
50% Sulfuric Acid	♦	
37% Hydrochloric Acid	♦	
50% Nitric Acid		♦
50% Phosphoric Acid	♦	
<b>ORGANIC ACIDS</b>		
10% Lactic Acid	♦	
5% Formic Acid	♦	
10% Acetic Acid		♦
<b>ALKALINE</b>		
30% Calcium Chloride	♦	
20% Potassium Chloride	♦	
Saturated Calcium Hydroxide	♦	
25% Ammonia	♦	
50% Sodium Hydroxide	♦	
10% Sodium Hypochlorite	♦	
<b>ORGANIC SOLVENT</b>		
Methyl Alcohol	♦	
Toluene	♦	
Petrol	♦	
<b>AQUEOUS SOLUTION</b>		
Water	♦	
Sugar Solution	♦	
10% Sodium Chloride	♦	

### 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 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.