ARKIFLOOR EHG





PRODUCT DESCRIPTION

Arkifloor EHG is a epoxy flooring system with superb chemical resistance and good adhesive properties designed specially for environment demanded for high specifications of aesthetic and corrosion control. Arkifloor EHG Standard gives a smooth, uniform and hard surface preventing dust accumulation and able to take medium to heavy-duty vehicular movement. When it is applied in non-slip form, excellent anti-skid performance can be achieved.

Arkifloor EHG is suitable to be applied on old or new concrete and cementitious floor of industrial and commercial laboratories, food factories, production factories, warehouses, workshops, carpark floors, power plants, wafer plants, and chemical storage rooms, etc. Arkifloor EHG 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 proof, reduces floor maintenance
- · Strong and durable with seamless finish
- Excellent impact and abrasion resistance for medium to heavy-duty 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: 260 microns	
Flash Point	20°C	
Loading Capacity (30°C)	Surface Dry : 4 hrs Fully Cured : 7 days	
Pot Life (30°C)	Approx. 60 mins	
Volume Solid	75 <u>+</u> 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. 1.22 <u>+</u> 0.10	

TECHNICAL PROPERTIES

DESCRIPTION	EHG (Standard)	EHG (Non-slip)
Adhesion Strength JIS K 5400 8.7	2.5 N/mm ²	2.5 N/mm ²
Abrasion Resistance JIS K 5400 8.9	30 mg	26 mg
Freezing and Melting Test (After 100 cycles of each cycle = -20 °C x 16 hrs + 20 °C x 8 hrs)	No change	No change
Hardness	2H	2H
Heat and Cool Test JIS A 6909 5.9.1 (100 cycles of each cycle = immersion in water x 18 hrs, - 20°C x 3 hrs, + 50°C x 3 hrs)	No change	
Tensile Strength & Elongation At Break ASTM D 882:95a	14.07 N/mm ²	
Impact Resistance JIS K 5400 8.3.2 Dupont test: Dropping 500g of steel ball from 50 cm height	No peeling / cracks	
Odor	Low	
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

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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

MIZING.	, , , , , , , , , , , , , , , , , , , ,	
Mixing Ratio (by volume ratio)		
Base	Hardener	
100	29.4	

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. Subsequently, dilute the mixture with **EH Thinner** as needed.

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**, one coat of **Arkifloor EHG** and one coat 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 EHG** at temperature below 10°C.

Coverage		
Per Coat	0.17 - 0.20ltr/m²/coat 0.34 - 0.40ltr/m²/2coat 5 - 6m²/ltr/coat 2.5 – 3.0m²/ltr/2coat	
Overcoating Interval	8 hrs, max 3 days	
No. of Coat	2	

PACKING STYLE

Arkifloor EHG (22 Ltr/s	et)
Arkifloor EHG Base	17 litre/can
Arkifloor EHG Hardener	5 litre/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

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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	+	
37% Hydrochloric Acid	+	
50% Nitric Acid		•
50% Phosphoric Acid	*	
ORGANIC ACIDS		
10% Lactic Acid	*	
5% Formic Acid	•	
10% Acetic Acid		*
ALKALINE		
30% Calcium Chloride	*	
20% Potassium Chloride	*	
Saturated Calcium Hydroxide	*	
25% Ammonia	*	
50% Sodium Hydroxide	*	
10% Sodium Hypochlorite	*	
ORGANIC SOLVENT		
Methyl Alcohol	*	
Toluene	*	
Petrol	*	
AQUEOUS SOLUTION		
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.

<u>Disclaimer</u>:

* 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.