

# BIOFINE

The Evolution Of An Ecologically Friendly High Performance Emulsion



**SK KAKEN (M) SDN.BHD.**



Sirim  
Eco Label  
Low VOC  
License No:  
ELS0995001



Sirim  
Certified To  
MS-134:2007  
PS 057101



Singapore  
Green Label  
Environmentally Friendly/  
Low VOC Paint  
032-206-2757

The world's leading environmentalists' efforts to protect our living environment are unceasing. SKK takes pride in supporting the 'green' movement and this propels us to develop an environmentally friendly high performance aqua-based paint.



Dirt Resistance



High Durability



Heat Reflective



Weather Resistance



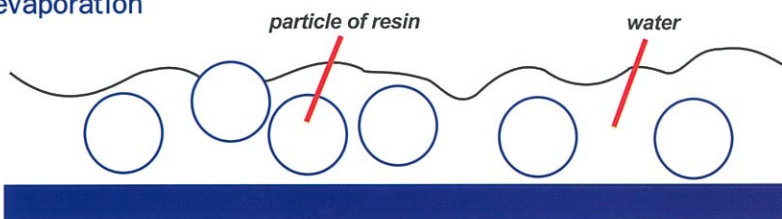
Low TVOC 1%

# BIOFINE, a Reactive Type Acrylic Paint

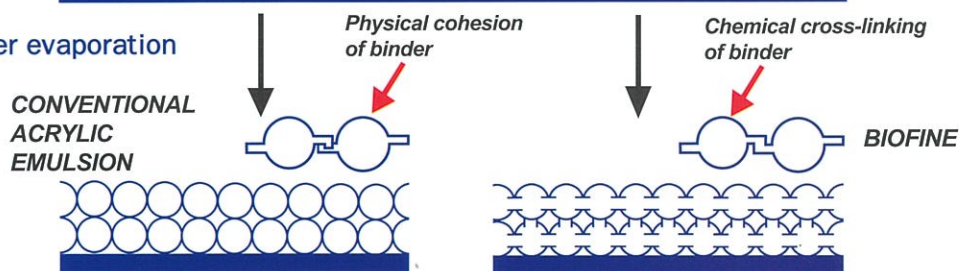
## Cross-Linking Mechanism

BIOFINE has an unique curing system entirely different from the conventional Acrylic Emulsion Paints.

### Stage 1 : Before water evaporation



### Stage 2 : After water evaporation



BIOFINE cures by the chemical cross-linking of binder hence resulting in durable and dense paint film. Unlike conventional solvent-based paints or emulsion paints, it does not emit any obnoxious or toxic odour.

## Advantages

### ■ Superior Film Performance

Its chemical cross-linking film formation structure provides excellent resistance to water, alkali and other forms of contamination. Biofine is thus suitable for a wide range of application conditions.

### ■ Washability

Its tough film allows scrubbing without causing any damage of the film. Therefore Biofine can withstand more washing cycles than conventional Acrylic Emulsion paints.

### ■ Heat Reflective with SRI Test

Its paint film helps to reflect the UV, heat and comply with GBI / Leed requirement.

### ■ Fungus Resistant & Algae Resistance

Biofine is designed to resist contaminants such as dirt, dust, spores, moulds, fungus and algae.

### ■ Odourless

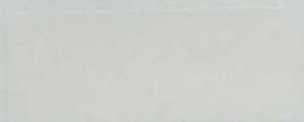
Solvent-based paints form tougher paint films than conventional acrylic emulsion paints. While, the former gives off a strong unpleasant toxic odour, Biofine forms the desired tough film without emitting any unpleasant toxic smell.

## APPLICATION SPECIFICATION

Process	Material	Mixing Ratio (By Weight)	Consumption (ltr /m <sup>2</sup> )*	Number Of Coats	Interval(hrs)			Remarks
					Within Process	Between Process	Final Curing	
Substrate Preparation	<ul style="list-style-type: none"><li>Allow the Substrate to dry for moisture content of 10% or less, ensuring ph value of 10 or below</li><li>Remove all foreign matters, make good cracks and surface imperfections.</li></ul>							
Primer	Biofine Sealer	100	0.10 – 0.15	1	-	Min.2	-	By Roller, Brush or airless spray gun.
	Water	0 – 15						
Finish	Biofine	100	0.25 – 0.30	2	Min.2	-	Min.24	
	Water	0 – 15						

\* Actual consumption varies depending on wastage on job site.

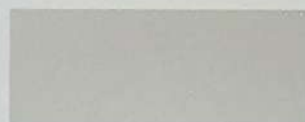




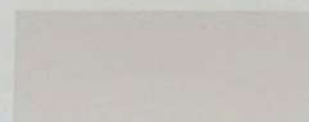
BFS 0500



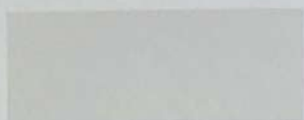
BFS 0502



BFS 1502



BFS 086



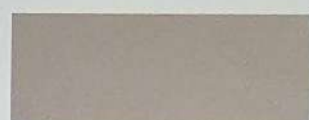
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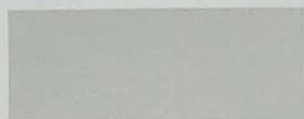
BFS 2502



BFS 176



BFS 3005



BFS 1500



BFS 485



BFS 175



BFS 415



BFS 2000



BFS 522



BFS 3502



BFS 465



BFS 3000



BFS 495



BFS 168



BFS 580



BFS 4000



BFS 4010



BFS 5350



BFS 655 ●



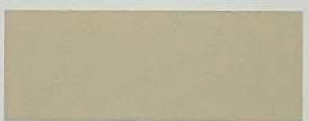
BFS 5000



BFS 5010



BFS 546



BFS 095



BFS 600



BFS 1070



BFS 520 ●



BFS 027



BFS 6085



BFS 7010 ●



BFS 6086



BFS 365



BFS 164



BFS 1295



BFS 514



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BFS 163



BFS 1314 ●



BFS 075



BFS 1544 ●



BFS 123



BFS 1283



BFS 186 ●



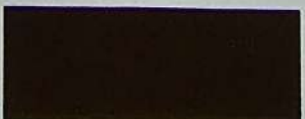
BFS 1546 ●



BFS 124



BFS 1284 ●



BFS 185 ●



BFS 184 ●



## COMPARISON TEST DATA

Note: Higher figure shows higher resistance

ITEM		RESULT			THE METHOD OF THE TEST
		BIOFINE	ACRYLIC EMULSION	SOLVENT PAINT	
Contamination Resistance		5	1	5	Under 20°C, 65%RH, the specimen is applied and kept for 8 hours. Then, the adhesiveness of the blasted block sand is evaluated.
Washability (Wet Scrub Resistance)		20,000 times	3,000 times	20,000 times	SS5 Part F5 (2003) The specimen is rubbed by a pressure of 450g.
Vapour Resistance		5	1	5	Under 100% relative humidity, leave the specimen for 24 hours.
Water Resistance		5	4	5	JIS K 5600 6.2(2), immersed in water for 96 hours.
Hot Water Resistance		5	1	5	Immersed in 50°C water for 48 hours.
Alkali Resistance		5	1	5	JIS K 5600 6.1, immersed in saturated calcium hydroxide for 48 hours.
Fungus Resistance		5	1	2	JIS Z 2911. Under 28°C, leave fungus on specimen for 2 weeks
Weather Resistance	Contamination	4	3	5	Expose the specimen for 12 months
	Surface Condition	5	Crack	5	

## TEST RESULT INTERPRETATION

### ■ Environment Friendly

\* This product was evaluated by PSB Singapore as quality product to pass the GREEN LABEL requirement.

### ■ Washability

According to SS5 Part F5 (2003), conventional Acrylic Emulsion Paint fail in the 3000 times washability test.

BIOFINE provides a strong film surface which has a resistance to 20,000 times in the washability test.

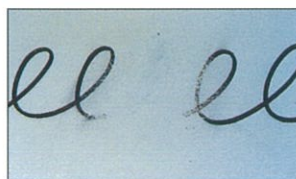


BIOFINE



CONVENTIONAL A.E.P

Surfaces coated with conventional Acrylic Emulsion Paint absorb ink of the water-based line marker easily. In contrast, BIOFINE, due to its strong film structure, can resist the penetration of ink and provides washable surface.



BIOFINE



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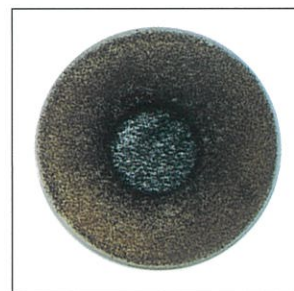
Tel: 603-2282 9800 Fax: 603-2282 9810 Website: [www.sk.com.my](http://www.sk.com.my)

### ■ Fungus Resistance & Algae Resistance

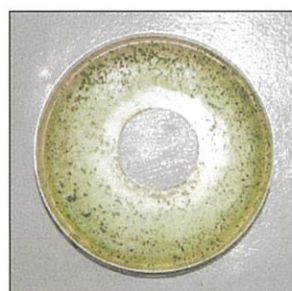
This is the result of the Cultivation Test after 14 days in accordance with JIS Z 2911. Conventional Acrylic Emulsion Paint show a propagation of fungi.



BIOFINE



CONVENTIONAL A.E.P



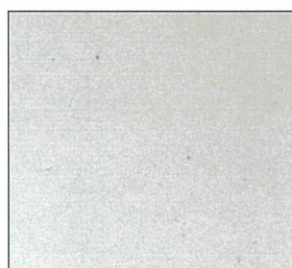
BIOFINE



CONVENTIONAL A.E.P

### ■ Durability & Anti-Contamination :

After outdoor exposure for 12 month, BIOFINE did not show any crack or remarkable contamination due to its non-tacky nature.



BIOFINE



CONVENTIONAL A.E.P