

# EPOXY RESIN 51-FLOORING

## Two component Self Leveling Epoxy Flooring Resin

### DESCRIPTION

**EPOXY RESIN 51-FLOORING** is a two component, self-leveling, solvent free, epoxy-based floor coating with excellent chemical resistance, high impact and abrasion resistance.

### COMPLIANCE – CERTIFICATION

**CE** certified acc. EN 13813

### APPLICATIONS

- Industrial Floors
- Hospitals
- Food, Chemical and Pharmaceutical Industries
- Indoor Car Parks
- Retail Shopping Areas
- Hotels

### FEATURES & BENEFITS

- Solvent free
- High impact resistance
- Excellent chemical resistance
- Excellent mechanical properties, high tensile and tear strength, abrasion resistance.
- Inhibits fungal and bacterial growth

### APPLICATION

#### Concrete substrate conditions (standard):

- Hardness:  $R_{28} = 15\text{MPa}$
- Humidity:  $W < 5\%$
- Temperature: from  $12\text{ }^{\circ}\text{C}$  -  $35\text{ }^{\circ}\text{C}$
- Relative humidity:  $< 85\%$

Clean the surface thoroughly, mechanical grinding is highly recommended. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mold release agents, curing membranes must be removed. Fill surface irregularities with **EPOXY RESIN -21 T**.

### MIXING:

Before mixing component A+B, mix component A thoroughly. Pour Component B into the Component A pail and mix using a low speed (300rpm) electric drill until mixture is completely homogenous. Pay particular attention to the wall lining and bottom of the pail.

### PRIMING:

Prime all surfaces with **AQUADUR** or **AQUASMART-DUR** at a consumption of 150-200 gr/m<sup>2</sup>. Optionally sprinkle dry quartz sand on wet primer and blow off excess sand. Allow 12 hours and apply **EPOXY RESIN 51-FLOORING**.

### APPLICATION AS PAINT:

Apply **EPOXY RESIN 51-FLOORING** A+B without addition of quartz sand with a roller or spatula in two coats with 0.250-0.350 Kg/m<sup>2</sup> per coat (minimum total consumption 0.5 Kg/m<sup>2</sup>). To make an anti-slip finish the final layer is broadcasted with silica sand or corundum.

### APPLICATION AS SELF-LEVELING:

To the mixture of **EPOXY RESIN 51-FLOORING** A+B, add 1:1 by weight dry silica sand 0.1-0.3 diameter. Pour the material on the floor and apply by 5mm notched trowel. Use a spiked roller to subsequently removed entrapped air.

### PACKAGING

5Kg + 1Kg Pails

### SHELF LIFE

**EPOXY RESIN 51-FLOORING** can be kept for minimum 12 months in the original unopened pails at a temperature of  $5\text{ }^{\circ}\text{C}$  -  $25\text{ }^{\circ}\text{C}$  in dry places.

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## TECHNICAL SPECIFICATIONS

### The Liquid product:

PROPERTY	UNITS	METHOD	SPECIFICATION
-Pot Life (25°C) & 55% RH	Min.	Internal Method	40
-Mixing Ratio (Comp.A:Comp.B)			5:1
-Solids Content	%	Internal Method	99.8%
-Viscosity (initial mixing) (BROOKFIELD)	cP	ASTM D2196-86, at 25°C	2,000-4,000

### The Coating:

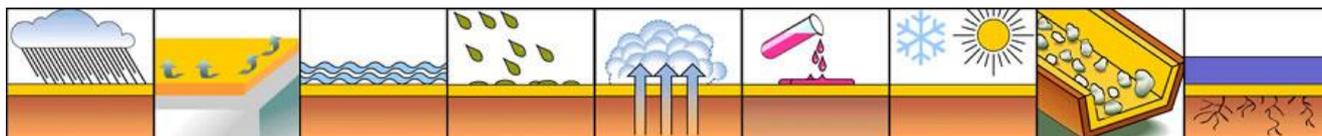
PROPERTY	UNITS	METHOD	SPECIFICATION
-Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	>95
-Max Temperature short time (shock)	°C	-	150
- Light Traffic ((25°C) & 55% RH)	Hours	INTERNAL	24
- Heavy Traffic	Days	INTERNAL	7
- Abrasion Resistance (TABER)	Mg loss	ASTM D6040, CS17 WHEELS, 1000 REVS, 1000 GR	55
- Adhesion to Concrete	N/mm <sup>2</sup>	ASTM D4541	>3
- Compression Strength	N/mm <sup>2</sup>	DIN EN 196-1	>50
- Shrinkage	%	INTERNAL	0
-Resistance to acids, solvents, lubricants etc.	-	INTERNAL	Excellent

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<b>CE</b>
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DoP 461-3-208/30.06.2015
EN 13813 2032 EPOXY RESIN 51-FLOORING Protection of floors subject to heavy traffic, abrasion and chemical resistance for indoor applications
www.alchimica.com

ESSENTIAL CHARACTERISTICS	PERFORMANCE	TEST STANDARD	HARMONISED TECHNICAL SPECIFICATION
ABRASION RESISTANCE	55 mg loss (c17s/1000/1000)	ASTM D6040	EN 13813
REACTION TO FIRE	CLASS F	EN 13813	
AGGRESSIVE SUBSTANCES	NO	EN 13813	
CAPILLARY ABSORPTION AND PERMEABILITY TO WATER	$W=0.02 \text{ Kg}/\{\text{m}^2 \times \text{h}^{0.5}\}$	EN 1062-3	
ADHESION STRENGTH BY PULL OFF TEST	$>3,5 \text{ N/mm}^2$	EN 13892-8:2002	

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Certified quality, environmental and occupational health & safety management systems:  
ISO 9001/14001 & ISO 45001.

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