FLOORSHIELD ESD SF EPOXY FINISH

Updated Sep'23

FLOORSHIELD ESD SF EPOXY FINISH is two component solvent-free coloured anti-static epoxy finish, which is designed with conductive properties, high chemicals and abrasion resistant for areas with light to medium traffic. Ideal for military arsenal, ammunition dump, electronic, semi-conducting device area, high power station and explosion risk plants, clean room and automotive assembly plant.

Product Features:

- Electrostatic conductive
- High chemical resistant against wide range of chemical
- Abrasion resistant against medium traffic and trolley movement.
- Easy to clean
- Low odor & VOC
- Meet British standard BS2050

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size		
Solvent-free	Interior	Gloss	Concrete Floor	Part A: 18 KG		
		61033		Part B: 3 KG		
Technical Data	Technical Data					
Density	: 1.40 ±0	.05 kg/L				
Adhesive strength	: > 2.0 N,	: > 2.0 N/mm2 (concrete failure)				
Tensile Strength	: 25 N/m	: 25 N/mm2				
Compressive Strength	: 55 N/mm2					
Flexural Strength	ength : 35 N/mm2					
Shore D Hardness	: 75-82					
Temperature Resistance : up to 70°C						
Water Permeability : Nil-Karsten test (impermeable)						
Cytotoxicity (2.4 or less)	: < 0.5					
Abrasion Resistance (1000 cy	ycles) : 5mg					
Decay Time Through Human	Body : < 20s	: < 20s				
Complied ANSI/ESD S-20.20-	2007					
Human Body Voltage (HBM)	: < 100 v	: < 100 volts				
System Resistance	: < 3.5 ×	$: < 3.5 \times 10^{7} \Omega$				
Mixing Ratio	: 4: 1 by	: 4: 1 by weight				
Pot-life (working time)	: 30 min	: 30 min				
Shelf life ::		: 12 months				
Storage condition	: Store ir sunlight	: Store in unopened, undamaged original container, protected from direct sunlight, at temperature between 10°C to 30°C.				
Coverage	: 0.30 kg	: 0.30 kg/m2/per coat (200um)				
Curing Time	Curing Time : Human Traffic : 30 hrs (15°C) ; 28 hrs (25°C); 24 hrs (32°C)		32°C)			
	Light Tr	affic : 48 hours (1	5°C) ; 36 hours (25°C);30	hours (32°C)		
	Fully Ch	emicals Cure : 10 day	s (15°C) ; 7 days (25°C); 7	days (32°C)		
Application Method						
Surface Preparation	: Substrat	e concrete or screed	d should be a minimum	of compressive strength		
	25N/mm should residues and free substrat shot bla should b edges, b	25N/mm ² and adhesive pull-off strength of minimum 1.5N/mm ² . The substrate should be clean and free from laitance, oil, dust, loose constituents, paint residues, chemicals, algae and other contamination. The substrate should be dry and free from ground water pressure. Apply FLOORSHIELD SF EPOXY MORTAR if substrate moisture exceeded 4%. The substrate must be prepared by vacuum shot blasting, rough contaminations to remove by grinding. Cracks and hollows should be properly remedied. Prepare grooves 3mm wide x 3mm deep at all edges, bay joints columns, doorways and drains for anchoring purpose.				



TECHNICAL DATA SHEET

Mixing	: Stir Part A mechanically for 30 seconds, add in Part B and stir for another 2 minutes to achieve homogenious mixture.				
Application	: FLOORSHIELD ESD SF EPOXY FINISH can be applied by suitable brush or roller. It should be applied within the pot-life of 30 minites at 28°C.				
Cleaning	: Clean up equipment with solvent immediately after use.				
Recommended Coating System	l				
Conductive System:					
Underlayment/Scratch coat/Primer					
Earthing Connection					
Conductive Primer	: FLOORSHIELD ESD PRIMER WB	: 100 um			
1 st Top Coat	: FLOORSHIELD ESD SF EPOXY FINISH	: 200 um			
2 nd Top Coat	: FLOORSHIELD ESD SF EPOXY FINISH	: 200 um			
Dissipative System:					
Underlayment/Scratch coat/Primer					
Earthing Connection					
1 st Top Coat	: FLOORSHIELD ESD SF EPOXY FINISH	: 200um			
2 nd Top Coat	: FLOORSHIELD ESD SF EPOXY FINISH	: 200um			
ESD FLOOR MAIN CHECKING CI	RITERIA & SPECIFICATION				
Conductive (with ELOORSHIELD ESD PRIMER WB):					
Surface to Ground (Earth) Rg Spec (BS	2050) : 1E+4 Ω ~ 9E+6 Ω (1 x 10 ⁴ ohm to 9 x 10 ⁶ ohm)				
Surface to Surface (Earth) Rs Spec (BS	2050) : 1E+4 $\Omega \sim 9E+6 \Omega (1 \times 10^4 \text{ ohm to } 9 \times 10^6 \text{ ohm})$				
<u>Dissipative</u> :					
Surface to Ground (Earth) Rg Spec (BS2050) : 1E+6 Ω ~ 9E+9 Ω (1 x 10 ⁶ ohm to 9 x 10 ⁹ ohm)					
Surface to Surface (Earth) Rs Spec (BS2050) :1E+6 $\Omega \sim$ 9E+9 Ω (1 x 10 ⁶ ohm to 9 x 10 ⁹ ohm)					
Environmental Condition Durin	g Application				
• Do not apply when the relative hum	nidity exceeds 90%.				
• Surface to be coated less than 5% a	bove the dew point.				
• Do not apply temperature below 5°C and temperatures above 40°C.					
Safety Precautions					
Keep container tightly closed and keep	eep out of reach children or away from food and drink.				
• Ensure good ventilation during appl	ication and drying.				
• When applying paint, it is advisable to wear eye protection.					
 In case of contact with eye, rinse with plenty of water immediately and seek medical advice. Delet must always he stand in a seal place. 					
Paint must always be stored in a cool place. Always here any stored in a cool place.					
• When transporting paint, care must be taken. Always keep container in a secure upright position.					
• Dispose on any paint waste in accordance with the appropriate Environment Quality Regulations.					
Note					
* Theoretical Coverage is based on a mathematical formula					
$\left[\frac{Volume\ Solid\ \%\ x\ 10}{Dry\ Film\ Thickness}\right] = m^2/lit/coat$					
and does not consider LOSS FACTORS. Variables like porosity of substrate, application method, dilution ratio, dry film thickness, opacity and so on will affect the loss factor and can vary from 30% - 50% or even more.					



NIPPON PAINT®

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself.

We reserve the right to alter the given without prior notice.