

WATER BASED ANTI BACTERIAL POLYURETHANE COATING

Description

Dr. Fixit Bioshield is a premium quality, water based, anti-microbial, hygienic coating specially designed for internal walls. It is formulated by using high quality polyurethane resin, light fast & chemical resistant colour pigments, fine inert fillers, additives & water as medium. It is used as a hygienic coating for hospitals, pharmaceuticals, food industries, dairies, etc as it is highly resistant to almost all kinds of stains and has extremely high wet scrub resistance. It provides protective barrier against harbouring of bacteria and germs on wall surfaces & ceilings.

The anti-bacterial property kills and / or inhibits the growth of harmful bacteria species such as:

- Escherichia Coli (E-Coli) (ATCC 25922)
- Staphylococcus Aureus (ATCC 6538)
- Legionella Pneumophila (ATCC 43111)
- Salmonella Typphimurium (ATCC 14028)
- Pseudomonas Aeruginosa (ATCC 9027)
- Methicillin Resistance S. Aureus (MRSA)
- Bacillus subtilis (MTCC 3055)
- Candida albicans (MTCC 227)
- Enterobatoer aerogenes (MTCC 111)
- Enterococcus Faecalis (MTCC 2729)
- Escherichia coli (MTCC 2939)
- Klebsiella pneumoniae (MTCC 39)

Areas of Application

- All areas wherever there is demand for highly sterile walls and ceiling surfaces
- For Hospitals - Ultra Clean room applications - Operation Theaters (regular and modular) and ICU's / Burn Care units & all critical areas.
- Pharmaceutical and Bulk Drug Units
- Food Preparation and Processing Facilities
- Breweries, Wine manufacturing and Soft drink Plants
- Cosmetic Production Facilities
- Dairies

Features & Benefits

- **Anti-microbial** - Provides hygienic sterile wall surfaces by preventing the growth of micro-organisms such as bacteria, algae and fungi.
- **Confirms to JIS Z 2801 norms** - Japanes International Standards for antimicrobial activity
- **Stain resistant** - Resists almost all kind of stains especially betadine and other biofluids
- **Cleanliness** - Maintains cleanliness in ultra clean rooms.
- **Scrub resistant** - Tough & durable coating provides very high wet scrub resistance.
- **Toxicity** - It is Non-Toxic
- **Eco-friendly** - It is water based without any VOC.
- **Ease of application** - No Dilution required and can be applied by brush, roller or spray.
- **Contain EPA approved Biocide** - Mandatory requirement for antimicrobial coatings in US
- **Antimicrobial properties** - Tested by M.S. University, Vadodra

Method of Application

1 SURFACE PREPARATION

• Surface preparation for new concrete & cementitious surfaces

New concrete & plastered surfaces must be allowed to cure for at least 6-8 weeks before coating. All surfaces must be clean, dry and free of loose material, oil & grease, etc. All cracks and gaps should be filled appropriately with Dr. Fixit Crack-X or Dr.Fixit Unifiller and subsequently make the surface smooth.

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Entirely remove any previous growth of fungus & algae by vigorous wire brushing and by cleaning with water. Treat with Dr. Fixit Biowash to ensure complete removal of algae & fungal growth.

• **Previously painted surfaces**

Alkyd paint, if any, should be sanded thoroughly to remove loose particles and made dull and matt for better adhesion. Treatment for algae & fungal growth remains same as stated earlier.

• **Modular OT: surface preparation**

Fill all the joints and grooves with appropriate sealant. Surface to be treated should be sanded with emery paper. Wash and clean with water. Allow the surface to dry.

2 PRIMING

• **Cementitious surfaces**

Dr. Fixit Primeseal is to be applied by thinning it 2 parts by volume with 1 part water. The primer coat is to be applied with brush. Coverage approx. 80-100 sq.ft / litre. Allow it to dry for 2-3 hrs before proceeding for further applications.

• **Surface levelling**

Allow the surface to dry for 4-5 hrs then level the surface with acrylic putty in 2 coats with interval of 6-8 hrs.

• **Re-Priming**

Apply one coat of primer - Dr. Fixit Primeseal- diluted 2:1 by volume with water.

3 APPLICATION & FINISHING

Allow the primer to dry for 4-5 hrs and then apply 2 coats of Dr. Fixit Bioshield without any dilution with interval of 6-8 hrs.

• **For Modular OT**

Dilute Dr. Fixit Bioshield in the ratio of 1:1 by volume with water and apply the same as priming coat.

Allow to dry for 6-8 hrs and then apply two coats of Dr. Fixit Bioshield without any dilution with time interval of 6- 8 hrs.

Precautions & Limitations

- Do not dilute Dr. Fixit Bioshield
- Treat the surface with Dr Fixit Biowash prior to putty application
- Apply touch-up primer over touch-up putty to avoid patchiness.
- Not recommended for bathrooms & wet areas

Technical Information

PROPERTIES	SPECIFICATION	RESULTS
Colour		White
Texture		Smooth (Matt Finish)
Specific gravity @ 30°C		1.3
Solid content, %	ASTM D 1010	51 +/- 1
Dry film thickness, Micron		30-40 per coat

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Drying time, Hrs @ 30°C & 60% RH		3-4
Re coating time, Hrs @ 30°C & 60% RH		6-8
Method of Application		By brush, roller
Elongation, %	ASTM D 412-02	Minimum 100
Rapid chloride permeability	ASTM C 1202 - 97	Low
Water permeability (5 bar pressure)	BS EN 12390, part 8:2000	Nil

Coverage

- 5-6 m² / ltr for two coats.
- Coverage may vary depending upon nature and texture of substrate.

Packaging

1, 4, 10 and 20 ltrs

Shelf Life & Storage

Shelf life is 12 months from the date of manufacturing in unopened condition. Store in a cool & dry place.

Health & Safety Precautions

- Skin Contact: Wash skin with soap & water. Remove contaminated clothes.
- On eye contact: Immediately splash eyes with plenty of water. Consult Physician if irritation persists.
- Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a Physician

Other Product Categories Available

DR. FIXIT has wide range of Waterproofing & Construction chemicals which includes,

- Water Proofing Systems
- Tile Adhesives
- Floorings
- Thick and Thin Bed Mortar Additives
- Marble Stone and Concrete Protective Systems
- Surface Plaster Systems
- Concrete Structural Repair Products
- Caulks, Crackfillers & Sealants
- Grouts and Anchors
- Bonding Agents and Additives
- Construction Speciality Products
- Fire Proof Mortars



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