

# FORMAFREE

High quality, emulsion Functional coating



09.2022 V.02

Special, high quality water-based paint for walls and ceilings for interior use. It develops an active substrate which can eliminate the formaldehyde that is present in the air and has a zero impact regarding VOC emissions. Formafree achieves a perfect aesthetic result of high-quality standards, while also contributing to the improvement of indoor air quality.



**Stir well before use**



**Coverage:**  
13-15 m<sup>2</sup>/lt



**Drying time:**  
Between 30 to 60 minutes



**Thinning**  
with water at a percentage of 13-15% by volume



**Paint:**  
Roller



**Paint:**  
Brush



**Paint:**  
Airless gun

## Product Characteristics

- Formaldehyde eliminator
- Zero VOC content
- Extreme low dangerous substances content
- Total emissions category A+
- High opacity and coverage
- Good mechanical resistance
- Good resistance to often cleaning
- Fast drying properties
- Odorless

## Shades

Available in white and three bases (Base A, Base B and Base C) to create thousands of shades with Berling's tinting system

## Packaging:

White

0.75lt

3lt

10lt

Bases

0.75lt

3lt

9lt



**EPD**<sup>®</sup>

THE INTERNATIONAL EPD<sup>®</sup> SYSTEM

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## Technical Specifications



<b>V.O.C.</b>	0 gr/lit (max content in Volatile Organic Compounds of ready to use product)
<b>Total product emissions</b>	Class A+ (Eurofins – ISO 16000)
<b>Density</b>	1.57± 0.03 ISO 2811 (White)
<b>Viscosity</b>	100 – 110 K.U., 25°C (ASTM D562). (White)
<b>Gloss</b>	<2.5 units at 60°
<b>Coverage</b>	13-15 m <sup>2</sup> /lit per coating.
<b>pH</b>	8.5-9
<b>Wet abrasion resistance</b>	Class 1 – EN ISO 11998/EN 13300
<b>Opacity CR</b>	> 98,5 (150µm wet film for white)
<b>Thinning</b>	Thin with water, at a percentage up to 13 to 15 % by volume.
<b>Application</b>	By brush or roller or airless spray.
<b>Drying time</b>	Touch dry after 30 to 60 minutes (the drying time might be elongated depending on temperature and humidity conditions).
<b>Reapplication</b>	after 4- 6 hours

### ACCORDING TO 2004/42/EK

PHASE II,  
Subcategory a,  
Matt coatings for  
interior walls and  
ceilings, Value limit  
V.O.C.= 30gr/lit,  
max VOC.=0gr/lit  
(ready to use  
product)



### Storage

Storage indoors to avoid exposure to high or low surfaces and high humidity conditions. Avoid sources of heat, radiation, static electricity, and storage near food. Keep container tightly closed. After opening can use product in a short period of time. Close the can well.



### Safety Instructions- Prevention of environmental harming

Minimize paint wastage by estimating how much paint you will need. Recover unused paint for reuse. Reuse of paint can effectively minimize the products life cycle environmental impact. Clean tools with water and soap. Do not put residual paint down the kitchen sink or toilet or into a waste bin. Empty cans with paint residues should be handled the same way and disposed according to local Regulations. You should ask for advice for the local government section responsible for the collection and disposal of waste. Ask for advice from an authorized body for waste recovery. Wear protective gloves and goggles/ Do not eat, drink when handling the product. Wash wand with suitable cleaning products. Keep out of reach of children. Always read the can label before use.  
**For further information ask for the Safety Data Sheet of the product.**

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# The Sick Building Syndrome Case



- **Indoor Air Quality (IAQ)**

It is referred to the air quality within the buildings and structures in general. IAQ is known to affect the health, comfort, and well-being of building occupants. Poor indoor air quality has been linked to Sick Building Syndrome. Factors that can affect the air quality are among others, volatile organic compounds (VOCs), formaldehyde and dangerous substances in general.

- **Volatile Organic Compounds (VOCs)**

This term refers to organic chemicals that have a high vapor pressure in normal room temperature. This causes large number of molecules to evaporate and enter the surrounding air. Some VOCs are very harmful like formaldehyde while others have compounding long-term health effects.

- **Formaldehyde**

Formaldehyde is chemical organic compound in gas state. It is a colorless gas and is a very harmful organic compound. The main concerns are associated with long term exposure by inhalation. Formaldehyde is used during construction of building materials and many household products. It is used in pressed-wood products, such as particleboard, plywood and fiberboard, glues and adhesives, permanent-press fabrics, paper products, coatings and some insulation materials.

- **Sick building syndrome (SBS)**

It is a condition where people in a building or a structure suffer from symptoms of illness or feel unwell for no apparent reason. The symptoms tend to increase with the time people spend in the building and improve over time or even disappear when people are away from the building. The main observation is an increased incidence of complaints of symptoms such as headache, eye, nose, and throat irritation, fatigue, and dizziness and nausea. SBS is caused by the internal air pollution coming, among others from VOCs, formaldehyde, dangerous substances.

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# The Sick Building Syndrome Case



- **The Formafree case**

Formafree is a functional technologically upgraded coating which combines the properties of a high-quality coating and at the same time it is an odorless, with zero VOC emissions and with extremely low content in dangerous substances coating. Except from these properties the product can neutralize the formaldehyde that is present in the air. This ability makes the product unique in the category of interior coatings. The functional properties of Formafree (zero VOC, extremely low content of dangerous substances, formaldehyde neutralization) have been measured and evaluated by Eurofins laboratory. Interior areas that have been painted with Formafree have better indoor air quality and thus contribute to the elimination of the Sick Building Syndrome.

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## Recommended application systems



### Interior walls

#### New surfaces

##### Preparation

For smoother results on new surfaces, it is recommended to use Berling's Stuco Grid putty, following the application instructions.

**STUCO GRID**  
2 coats

##### Primer

Prime with Berling Nanoprimer, or Plasterboard Primer or Acrylic Emulsion Primer, following the application instructions, in the same or similar shade to reduce the required final coatings.

**BERLING NANOPRIMER or  
PLASTERBOARD PRIMER or  
ACRYLIC EMULSION PRIMER**  
1 coat

##### Final coating

For a uniform and impressive result apply 2 coatings with Formafree.

**FORMAFREE**  
2 coats

#### • Old- already painted surfaces

##### Preparation

On already painted but healthy, non-stained surfaces, no special preparation is required. In the case of puttied surfaces, sanding with sandpaper is required.

##### Primer

For surfaces that are puttied and sanded and surfaces that have been chalked or covered with distemper paint or lime, it is required to be primed with Berling's primer Nature Aquafix.

**AQUAFIX NATURE or  
NATURE AQUASIL**  
1 coat

If the surface is stained by exhaust gases, smoke or other household pollutants, it is required to be primed with Berling's Nature Aquasil primer, before applying the product.

##### Final coating

For a uniform and impressive result apply 2 coatings with Formafree.

**FORMAFREE**  
2 coats

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## Recommended application systems



### Plasterboard surfaces

#### • New surfaces

##### Preparation

If necessary, putty with Berling Stuco Grid, following its application instructions.

##### STUCO GRID

2 coats

##### Primer

In case of putting the whole surface, prime with Nature Aquafix or Acrylic emulsion primer or Berling Nanoprimer.

If no puttying procedure is required, then use Berling Plasterboard primer, following its application instructions. Plasterboard Primer can be tinted in close or similar shade according to Berling's tinting system, to reduce the number of final coats.

##### AQUAFIX NATURE or ACRYLIC EMULSION PRIMER or BERLING NANOPRIMER or PLASTERBOARD PRIMER

1 coat

##### Final coating

For a uniform and impressive result apply 2 coatings with Formafree.

##### FORMAFREE

2 coats

#### • Old-already painted surfaces

##### Preparation

On already painted but healthy, non-stained surfaces, no special preparation is required. In the case of puttied surfaces, sanding with sandpaper is required.

##### Primer

For surfaces that are puttied and sanded and surfaces that have been chalked or covered with distemper paint or lime, it is required to be primed with Berling's primer Nature Aquafix.

If the surface is stained by exhaust gases, smoke or other household pollutants, it is required to be primed with Berling's Nature Aquasil primer, before applying the product.

##### AQUAFIX NATURE or NATURE AQUASIL

1 coat

##### Final coating

For a uniform and impressive result apply 2 coatings with Formafree.

##### FORMAFREE

2 coats

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