



## FORMAFREE

High quality, emulsion  
Functional coating



02.2020 v02

Packing: 0.75lt | 3lt | 10lt  
9lt in case of bases

### Description

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.

### 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 tintable bases (Base A, Base B and Base C) for achieving many of shades with Berling's tinting system.

### Coverage

13-15m<sup>2</sup>/lt

## 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

## 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.

## Recommended application systems

Old and new interior surfaces

<b><u>Interior walls</u></b>		
<b>New surfaces</b>		
<b>Preparation</b>	For perfect results on new surfaces, it is recommended to use Berling's Stuco Grid putty, following the application instructions.	2 coats
<b>Primer</b>	Prime with Berling Nanoprimer, following the application instructions.	1 coat
<b>Final coating</b>	Formafree	2 coats
<b>Old- already painted surfaces</b>		
<b>Preparation</b>	On already painted but healthy, non-stained surfaces, no special preparation is required. In the case of puttied surfaces, rubbing with sandpaper is required.	
<b>Primer</b>	For puttied and chalked surfaces or covered with distemper or lime it is necessary to prime them first with Nature Aquafix.	1 coat
	If the surface is dirty with smoke, flue gas or other household pollutants, it is necessary to apply Berling's Nature Aquasil primer before applying the product.	1 coat
<b>Final coating</b>	Formafree	2 coats

<b>Plasterboard surfaces</b>		
<b>New surfaces</b>		
<b>Preparation</b>	If necessary, putty with Berling Stuco Grid, following its application instructions.	2 coats
<b>Primer</b>	Prime with Berling Nanoprimer, following the application instructions.	1 coat
<b>Final coating</b>	Formafree	2 coats
<b>Old-already painted surfaces</b>		
<b>Primer</b>	In the case of already painted but healthy surfaces, priming is not required. In case of surfaces with loose and flaking paint, prime with Berling's Nanoprimer.  If the surface is dirty with smoke, gas or other household pollutants, it is necessary to apply Berling's Nature Aquasil primer before application.	1 coat  1 coat
<b>Final coating</b>	Formafree	2 coats

### Application Instructions

Thin with water at a percentage up to 12-13% by volume and then stir well before use. The surfaces to be painted must be dry and clean. Apply by brush or roller in two or more layers. Apply at temperatures from 10°C to 30°C and maximum relative humidity 80%. Overcoat after 4-6 hours.

### Technical Characteristics

<b>V.O.C.</b>	0 gr/lit (max content in Volatile Organic Compounds of ready to use product)
<b>Total emissions product</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 % 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**

Wear protective gloves and goggles. Do not eat or drink anything while using the product. Always wash hands with appropriate cleaning products.

Clean tools after use with soap and water. Do not dispose eluants and paint remains in the sink, toilet or bin. Empty cans and paint residues must be disposed of in accordance with applicable laws and local regulations. Advice should be asked from local authorities regarding the disposal and collection of waste.

Keep out of reach of children. Always read the label before use.

For further information ask for the Safety Data Sheet of the product.

*All the above information is based on laboratory tests and long-term experience of the company's scientific personnel. Product quality is guaranteed by our operational system, which is based on the requirements of ISO 9001, ISO 14001 and OHSAS 18001 Standards and EMAS Regulation. As producers we don't take any responsibility for any damage that may be caused in cases that the product hasn't been use for the appropriate application and according to the application instructions.*

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