

# Topaz Zero Silk 58903

## Product characteristics

### Description

Topaz Zero Silk is an environmentally friendly water based topcoat designed to prevent growth of harmful bacteria and mold. Based on 100% pure acrylic, it gives a smooth luxurious silk finish with excellent opacity, washability, flexibility and colour retention properties.

### Recommended use

Ideal as interior topcoat for walls, ceilings and partitions where strict hygiene control is required such as hospitals, kitchens, nurseries.

### Certificates / Approvals

- Third-party verified, product-specific Environmental Product Declaration (Type III EPD, ISO 14025, EN 15804)
- Tested and assessed according to standard for Fire Test on Building Materials and Structures; determination of the surface spread of flame of products BS 476-7. Class 1

### Features

- Anti-mold & anti-bacterial properties.
- Zero VOC.
- Formaldehyde, APEO & lead free.
- Improve indoor air quality.

## Product safety

**Flash point** 100°C [212°F]

### VOC content

Legislation	Value
EU	0 g/L [0.00 lb/US gal]
US (coatings)	6 g/L [0.05 lb/US gal]
US (regulatory)	29 g/L [0.24 lb/US gal]

VOC values may vary with shade, please consult the Safety Data Sheet, section 9.

### Handling

Handle with care. Before and during use, observe safety labels on packaging and paint containers and follow all local and national safety regulations. Always consult Hempel's Safety Data Sheet for this product along with the Product Data Sheet.

For professional use only.

## Product data

### Product code

58903

### Standard shade\* / code

White 10000 \*\*

Wide range of colours is available via Hempel's tinting system.

### Gloss

Silk

### Volume solids

38 ± 2%

### Specific gravity

1.4 kg/L [11 lb/US gal]

### Reference dry film thickness

30 micron [1.2 mils]

\* Wide range of colours are available via Hempel's Decortint system.

\*\* Colour stability may be affected by exposure to chemicals, high temperatures or inadequate ventilation.

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## Surface preparation

### Cleanliness

- The surface must be dry and clean prior to application.

### New build:

- Concrete must cure completely; for 28 days minimum.
- Moisture content in the surface must be below 4%.
- Minor areas can be sanded/abraded to obtain a uniform dense surface profile

### Maintenance and Repair

- Remove dust, loose material and any other contamination.
- Surface imperfections in the substrate must be fixed/filled before paint application.
- Use compatible cementitious repair material for major surface imperfections.
- Apply primer/sealer prior to application of filler.
- Areas with filler to be sealed with primer/sealer.

### Roughness

- Sand to smoothen filler.

Consult Hempel's separate Surface Preparation Guidelines for more details.

## Application

### Thinner

Fresh water

### Cleaner

Fresh water

## Application method

Tool	Thinning max vol.	Application parameters
Brush/Roller	5%	Not Applicable.
Air spray	15%	Nozzle pressure: 3-5 bar [44 psi] Nozzle orifice: 0.07-0.086"
Airless spray	5%	Nozzle pressure: 150 bar [2200 psi] Nozzle orifice: 0.017-0.021"

Spray data are indicative and subject to adjustment. Pressure is for a material temperature of 20°C [68°F].

## Film thickness

	Recommended
Dry film thickness	30 micron [1.2 mils]
Wet film thickness	79 micron [3.2 mils]
Theoretical spreading rate	13 m <sup>2</sup> /L [530 sq ft/US gal]

## Application conditions

- Surface temperature must be above 5°C [41°F] during application and curing.
- To avoid condensation, apply on a clean and dry surface with a temperature that is at least 3°C [5°F] above the dew point.
- Provide adequate ventilation during application and drying.

## Relative Humidity:

- Relative humidity must be below 75% during drying and curing.

## Application remarks

- Stir well before use.
- The practical consumption factor may vary depending on application conditions, equipment and workmanship.
- Two coats of the topcoat may be necessary to obtain full hiding power.

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## Drying and overcoating

### Product compatibility

- Previous coat: Recommended products are: Sealing/ Priming: Topaz zero primer 'recommended', Topaz WB primer or as specified
- Filling: Topaz zero filler 'recommended', Topaz interior filler, Maestro Mastic Filler or as specified

### Drying time

Surface temperature		20°C [68°F]	10°C [50°F]	40°C [104°F]
Surface dry	hours	2	3	1
Through dry	hours	4	6	2

Determined for dry film thickness 30 micron [1.2 mils] at standard conditions, see Hempel's Explanatory Notes for details. Any masking tape used during paint application should be removed while the paint is still in the wet condition.

### Overcoating

Hempel's specification supersedes any guidelines indicated in the overcoating table

Quality name		10°C [50°F]	20°C [68°F]	40°C [104°F]
Atmospheric mild				
Topaz Zero Silk 58903	Min	8 h	4 h	2 h
	Max	No max	No max	No max

### Drying conditions

- To obtain the drying time stated, it is important to maintain sufficient ventilation during application, drying and curing.

## Storage

### Shelf life

Ambient temperature	25°C [77°F]
Product	12 months

Shelf life from date of production, when stored in original, unopened containers. Thereafter, the product quality must be re-inspected. Storage at elevated temperatures may reduce shelf life. For advice, please consult Hempel.

### Storage conditions

- Temperature must not go below 0°C [32°F] during transport and storage.
- The product must be stored in accordance with Safety Data Sheet, label and local regulations. Keep the containers in a dry, shaded, cool, well-ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

## Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	8.4 g CO <sub>2</sub> e/m <sup>2</sup>	0.044 lb CO <sub>2</sub> e/ft <sup>2</sup>

The carbon footprint is for 1 square meter / square foot of surface area with a dry film thickness of 1 micron / mil.

The scope includes raw materials, in-bound transport to the Hempel factory, Hempel manufacturing processes, and any Volatile Organic Compounds emitted during and after the application of the product.

It is calculated based on the standard shade defined in this PDS. Values may vary with shade.

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## Additional documents

Additional information is available at the Hempel website <https://www.hempel.com/service-and-support/technical-guidelines> or at your local Hempel website:

- Explanatory Notes for Product Data Sheet.
- Application methods.

### Additional Certifications and Standards

Antibacterial, tested according to ISO 22196  
 Antifungal, tested according to BS 3900  
 Crack bridging ability 1 mm, tested according to ASTM C836/ ASTM C1305  
 Accelerated weathering of 500 hours, tested according to ASTM G151  
 Scrub resistance, tested according to BS EN ISO 11998  
 Hiding power, tested according to ASTM D2805  
 Non volatile Content, tested according to ASTM D2369  
 Volume solids, tested according to ISO 3233  
 Stability in can, tested according to ASTM D1849  
 Liquid water transmission, tested according to BS EN 1062-3  
 Chemical resistance, tested according to ASTM D1308  
 VOC, tested according to LEED and ISO 11890–2

This Product Data Sheet ("PDS") relates to the supplied product ("Product") and is subject to updating from time-to-time. Accordingly, the buyer/applicator should have regard to the PDS supplied together with the relevant batch of the Product (and not an earlier version). In addition to the PDS, the buyer/applicator may receive some or all of the following specifications, statements and/or guidelines as listed below or as are available from the Hempel website under 'Products' at [www.hempel.com](http://www.hempel.com) (the "Additional documents"):

No.	Document description	Location/comments
1.	Technical Statement	One-off specific advice provided on request for specific projects
2.	Specification	Only issued for specific projects
3.	PDS	This document
4.	Explanatory Notes to the PDS	Available at <a href="http://www.hempel.com">www.hempel.com</a> and contain relevant information about the Product testing parameters
5.	Application Instruction	Where available, at <a href="http://www.hempel.com">www.hempel.com</a>
6.	Generic technical guidelines (e.g. on application and surface preparation)	Where available, at <a href="http://www.hempel.com">www.hempel.com</a>

In the event of a conflict of information between the PDS and the Additional documents, the order of priority of information shall be in the order as set out above. In such event you should also contact your representative at Hempel for clarification. Furthermore, the buyer/applicator must have full regard to the relevant Safety Data Sheet provided with each Product and which can also be downloaded from [www.hempel.com](http://www.hempel.com).

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