Hempel's Galvosil 15780

Product characteristics

Description
Hempel's Galvosil 15780 is a two-component, medium-zinc, solvent-borne, selfcuring inorganic zinc silicate coating. Applicable by airless spray.

Hempel's Zinc metal pigment 97170 is in full compliance with ISO 3549 and ASTM D520 type II.

Recommended use
As a general purpose rust-preventing primer in paint systems for long-life protection of steel exposed to moderately to severely corrosive environment. In compliance with SSPC-Paint 20, type 1, level 2.

Service temperature:
- Without topcoat: maximum, dry, atmospheric exposure: 540°C [1004°F].
- Wet service temperatures: Please consult the Chemical protection guide at hempel.com.

Product safety

Flash point 14°C [57°F]

VOC content mixed product

Legislation	Value
EU	471 g/L [3.93 lb/US gal]
US (coatings)	471 g/L [3.93 lb/US gal]
US (regulatory)	471 g/L [3.93 lb/US gal]
China	471 g/L [3.93 lb/US gal]

According to specific legislation, see details in the Explanatory Notes available at Hempel website, hempel.com or at your local Hempel website. According to EPA Method 24.

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
15780

Product components
Base 15789
Zinc 97170

Standard shade / code
Grey 19840

Gloss
Flat

Volume solids
62 ± 2%

Specific gravity
2.3 kg/L [19 lb/US gal]

Reference dry film thickness
50 micron [2.0 mils]

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Surface preparation

Cleanliness
- Remove oil, grease and other contaminants by suitable detergent cleaning.
- Remove salts, detergents and other contaminants by high pressure fresh water cleaning.

New build:
- Abrasive blasting to min. Sa 2½ (ISO 8501-1) / SP 10 (SSPC).
- Remove dust, blast media and loose materials.

Maintenance and Repair
- According to Hempel's Specification.

Roughness
- Surface profile Medium (G) (ISO 8503-2).

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

Application

Mixing ratio
Base 15789 : Zinc 97170
(4.2 : 5.8 by weight)

Products containing floating or settling particles/pigments need to be continuosly stirred during application. This is especially important in case of heavy thinning.

Thinner
Hempel's Thinner 08700
Hempel's Accelerator & Thinner 0870M

Cleaner
Hempel's Thinner 08700

Pot life

Product temperature	20°C [68°F]
Pot life	4 hours

Application method

Tool	Thinning max vol.	Application parameters
Airless spray	10%	Nozzle pressure: 100 bar [1500 psi] Nozzle orifice: 0.019-0.023"
Air spray	10%	Not Applicable.
Brush	10%	Not Applicable.

To minimise dry spray at high temperatures, extra thinning may be necessary. If brush or roller application is used, more coats will be necessary to achieve the specified dry film thickness. Spray data are indicative and subject to adjustment. Pressure is for a material temperature of 20°C [68°F].

Film thickness

Specification range	Low	High	Recommended
Dry film thickness	50 micron [2.0 mils]	80 micron [3.2 mils]	50 micron [2.0 mils]
Wet film thickness	81 micron [3.2 mils]	129 micron [5.2 mils]	81 micron [3.2 mils]
Theoretical spreading rate	12 m²/L [489 sq ft/US gal]	7.7 m²/L [314 sq ft/US gal]	12 m²/L [489 sq ft/US gal]

Application conditions
- 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.
- Surface temperature must be above 0°C [32°F] during application and curing.
- Surface temperature must be below 40°C [104°F] during application and curing.

Relative Humidity:
- Relative humidity must be above 50% during curing.

Application remarks
- Consult Hempel's Application Guidelines and Instructions for more details.

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Drying and overcoating

Product compatibility
- Previous coat: None.
- Subsequent coat: According to Hempel's Specification.

Drying time

Surface temperature		20°C [68°F]
Touch dry	min	15
Fully cured	hours	16

Determined for dry film thickness 50 micron [2.0 mils] at standard conditions, see Hempel's Explanatory Notes for details.

Overcoating

Overcoating times are indicative for products of the same generic chemistry. Consult Hempel's specification for more information.

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

Overcoating details
- Remove zinc salts or other contamination before overcoating.
- Flash-coat technique is recommended when overcoating Galvosil qualities.
- Inorganic zinc silicates must be fully cured before overcoating.

Storage

Shelf life

Ambient temperature	25°C [77°F]
Base	6 months
Zinc	36 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
- Must be stored under absolutely dry conditions, protect against seeping humidity.

Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	17.6 g CO_2e/m^2	0.092 lb CO_2e/ft^2

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.
- General Application Guidelines

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 (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 www.hempel.com and contain relevant information about the Product testing parameters
5.	Application Instruction	Where available, at www.hempel.com
6.	Generic technical guidelines (e.g. on application and surface preparation)	Where available, at www.hempel.com

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.

Hempel shall not be liable for defects where the application of the Product has not been made fully in accordance with the recommendations and requirements set out in the relevant PDS and the Additional Documents. The information and terms of this disclaimer apply to this PDS, the Additional documents and any other documents supplied by Hempel in respect of the Product. In addition, the Product is supplied and all technical assistance is given subject to Hempel's General Conditions of Sale, Delivery and Service, unless otherwise expressly agreed in writing.