Hempel's Silicone Acrylic

Product characteristics

Description
Hempel's Silicone Acrylic 56940 is a single-component heat resistant acrylic modified polysiloxane paint.

Recommended use
As a topcoat for atmospheric protection, especially suited for hot pipelines, exhaust systems, stacks and other hot surfaces. The product offers excellent weathering resistance and can be used for service temperatures up to 260°C (500°F). Certain shades may fade at high temperatures or on long-term heat exposures. Suitable for newbuild or maintenance in a wide range of industries and applications where a coloured finish is desired.

Service temperature:
- Maximum, dry exposure only: 260°C [500°F].
- Aluminium shades: 400°C [752°F].
- Minimum, recommended by Hempel for dry exposure: -50°C [-58°F].

Product safety

Flash point 25°C [77°F]

VOC content

Legislation	Value
EU	406 g/L [3.39 lb/US gal]
US (coatings)	404 g/L [3.37 lb/US gal]
US (regulatory)	405 g/L [3.38 lb/US gal]
China	406 g/L [3.39 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.

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: 56940

Standard shade / code: Light grey 11150 *

Gloss: Semi-flat

Volume solids: 54 ± 2%

Specific gravity: 1.4 kg/L [11 lb/US gal]

Reference dry film thickness: 25 micron [1.0 mils]

Aluminium shade / code: Aluminium / Aluminium grey 19000 **

Gloss: Please consult Hempel's Guideline on aluminium pigmented coatings.

Volume solids: 29 ± 2%

Specific gravity: 1.1 kg/L [9 lb/US gal]

Reference dry film thickness: 25 micron [1.0 mils]

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) / NACE No.2.
- Remove dust, blast media and loose materials.

Maintenance and Repair
- Spot abrasive blasting to min. PSa 2½ (ISO 8501-2) / SP 10 (SSPC).
- Remove dust, blast media and loose materials.

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

* Colour stability may be affected by exposure to chemicals, high temperatures or inadequate ventilation.
** Appearance of the aluminium pigmented coats will depend on application method, drying conditions, handling, etc.

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Application

Mixing ratio
Stir well before use.

Thinner
Hempel's Thinner 08080

Cleaner
Hempel's Thinner 08080

Application method

Tool	Thinning max vol.	Application parameters
Airless spray	15%	Nozzle pressure: 125 bar [1800 psi] Nozzle orifice: 0.017"
Air spray	25%	-
Brush	15%	-

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	25 micron [1.0 mils]	50 micron [2.0 mils]	25 micron [1.0 mils]
Wet film thickness	46 micron [1.9 mils]	93 micron [3.7 mils]	46 micron [1.9 mils]
Theoretical spreading rate	22 m²/L [896 sq ft/US gal]	11 m²/L [448 sq ft/US gal]	22 m²/L [896 sq ft/US gal]

Product may be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate, drying and curing time and overcoating interval. For best performance, avoid excessive film thickness.

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 10°C [50°F] during application and curing.
- Can be applied onto hot substrate up to maximum 40°C [104°F].
- For application and curing at other conditions, please contact your local Hempel representative.

Application remarks
- Two coats of the topcoat may be necessary to obtain full hiding power.

Drying and overcoating

Product compatibility
- Previous coat: According to Hempel's Specification. Recommended products are: Hempel's Silicone Zinc 16900, Hempaprime Ultimate 850, Hempel's Silicone Aluminium 56914
- Subsequent coat: None.

Drying time

Surface temperature		20°C [68°F]
Touch dry	min	15
Hard dry	min	30

Determined for dry film thickness 25 micron [1.0 mils] at standard conditions, see Hempel's Explanatory Notes for details.

Drying conditions
- To obtain the drying time stated, it is important to maintain sufficient ventilation during application, drying and curing.
- Condensation on the freshly applied coating should be avoided.

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

Other remarks
- Hempel's Specification supersedes any recommendations given in the Product Data Sheets.

Storage

Shelf life

Ambient temperature	25°C [77°F]
Product	24 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. The shelf life printed on product labels is based on regional climate conditions. For advice, please consult Hempel.

Storage conditions
- 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.

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Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	11.7 g CO_2e/m^2	0.061 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.

Additional documents

Additional information is available at the Knowledge Center: https://www.hempel.com/knowledge-center . The documents below can be found in the Technical Guidelines section: https://www.hempel.com/knowledge-center/technical-guidelines or at the 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.