

# Hempel's HS Gas Pipe Coating 87831

## Product characteristics

### Description

Hempel's HS Gas Pipe Coating 87831 is a two-component epoxy polyamine cured coating. Formulated according to the requirements in AMERICAN PETROLEUM INSTITUTE'S STANDARD RP 5L2.

### Recommended use

As a one-coat system for internal coating of gas pipes designed for carrying of dry, treated gas. The coating is designed to reduce the drag resistance in the pipeline by making the pipe walls smoother.

## Product safety

**Flash point** 28°C [82°F]

### VOC content mixed product

Legislation	Value
EU	159 g/L [1.33 lb/US gal]
US (coatings)	159 g/L [1.33 lb/US gal]
US (regulatory)	159 g/L [1.33 lb/US gal]
China	159 g/L [1.33 lb/US gal]

According to specific legislation, see details in the Explanatory Notes available at Hempel website, [hempel.com](http://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

87831

### Product components

Base 87838  
Curing agent 95830

### Standard shade / code

Brownish red 50890 \*

### Gloss

Glossy

### Volume solids

82 ± 2%

### Specific gravity

1.4 kg/L [12 lb/US gal]

### Reference dry film thickness

70 micron [2.8 mils]

### Aluminium shade / code

Dark brown 67120 \*\*

### Gloss

Please consult Hempel's Guideline on aluminium pigmented coatings.

### Volume solids

81 ± 2%

### Specific gravity

1.4 kg/L [12 lb/US gal]

### Reference dry film thickness

70 micron [2.8 mils]

\* Epoxy coatings may discolour and chalk when exposed to UV light. This does not affect the performance of the coating.

\*\* Appearance of the aluminium pigmented coats will depend on application method, drying conditions, handling etc. Please see the Guideline on Aluminium pigmented coatings at [hempel.com](http://hempel.com) or at your local Hempel website.

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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 Fine (S) (ISO 8503-2).

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

## Application

### Mixing ratio

Base 87838 : Curing agent 95830  
(4 : 1 by volume)

Stir well before use.

### Thinner

Hempel's Thinner 08450

### Cleaner

Hempel's Thinner 08450

### Pot life

Product temperature	20°C [68°F]	60°C [140°F]
Pot life	60 min	9 min

## Application method

Tool	Application parameters
Dual feed spray	Nozzle pressure: 150 bar [2200 psi] Nozzle orifice: 0.017-0.027"

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	70 micron [2.8 mils]	70 micron [2.8 mils]	70 micron [2.8 mils]
Wet film thickness	90 micron [3.5 mils]	90 micron [3.5 mils]	90 micron [3.5 mils]
Theoretical spreading rate	12 m <sup>2</sup> /L [490 sq ft/US gal]	12 m <sup>2</sup> /L [490 sq ft/US gal]	12 m <sup>2</sup> /L [490 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.
- Material temperature should be maximum 60°C [140°F].
- The optimum temperature will depend on the intended DFT, the nozzle size and the spraying pressure.

## Relative Humidity:

- Relative humidity must be in the range 30-85% during curing.
- Relative humidity must be in the range 30-85% during application.

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## Drying and overcoating

### Product compatibility

- Previous coat: None.
- Subsequent coat: None.

### Drying time

Surface temperature		10°C	20°C	30°C	40°C
		[50°F]	[68°F]	[86°F]	[104°F]
Hard dry	hours	10	4½	2	1

Determined for dry film thickness 80 micron [3.1 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.

### Overcoating details

- If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.
- The surface must be dry and clean prior to application.

### Other remarks

- Epoxy coats have an inherent tendency of chalking in outdoor exposure. This does not affect the performance of the coating.
- Hempel's Specification supersedes any recommendations given in the Product Data Sheets.

## Storage

### Shelf life

Ambient temperature	25°C [77°F]
Base	12 months
Curing agent	36 months

Shelf life from date of production, when stored in original, unopened containers. Thereafter, the product quality must be re-inspected. Always check the best before date or expiry date on the label.

### Storage conditions

- Product must be stored according to local legislation, at maximum 40°C [104°F], without direct sunlight and protected from rain and snow.

## Additional documents

Additional information is available at the Hempel website [hempel.com](http://hempel.com) or at your local Hempel website:

- Explanatory Notes explaining the fields in this Product Data Sheet.
- Surface Preparation Guidelines.
- Application Guidelines for different 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](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).

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.