

# Hempel's Primer 359AR

## Product characteristics

### Description

Hempel's Primer 359AR is an epoxy resin and hardener without solvent for the preparation of screed mortars, bottom layers and sealants for pavements. Addition of silica is recommended

### Recommended use

Hempel's Primer 359AR is recommended for repair and filling of cracks, fissures, cavities, chipping and loss of material in concrete pavements, cement and other construction material in industries, workshops, warehouses, car parks etc, before the application of the final coating. The product is used as a base coat or sealer in epoxy systems for concrete or cement pavements, applied with roller or metal trowel. Hempel's Primer 359AR is recommended to be used together with addition of silica and a finishing system such as Hempadur Resin HB 35860 or according to specification

### Features

- Excellent adhesion to concrete, cement and other building materials.
- Solvent free.
- High chemical resistance.
- High mechanical resistance (abrasion, impacts and blows).
- Fast curing, can be recoated after 6 hours.

## Product safety

**Flash point** 90°C [194°F]

### VOC content mixed product

Legislation	Value
EU	34 g/L [0.28 lb/US gal]
US (coatings)	34 g/L [0.28 lb/US gal]
US (regulatory)	34 g/L [0.28 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

359AR

### Product components

Base 359A6  
Curing Agent 978AR

### Standard shade / code

Transparent 00000

### Gloss

Semi-flat

### Volume solids

97 ± 2%

### Specific gravity

1.1 kg/L [9 lb/US gal]

### Reference dry film thickness

75 micron [3.0 mils]

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## Surface preparation

### Cleanliness

- Remove oil, grease and other contaminants by suitable detergent cleaning.
- The surface must be dry and clean prior to application.
- Concrete: According to Hempel's Specification.
- Remove dust, blast media and loose materials.
- Remove salts, detergents and other contaminants by high pressure fresh water cleaning.

### New build:

- Concrete must cure completely; for 28 days minimum.
- Remove laitance and efflorescence by water jetting, abrading or blasting.
- Level the surface with suitable filler.
- A uniform anchoring profile should be achieved by suitable surface preparation method(s).
- Moisture content in the surface must be below 4%.
- Abrasive blasting to min. Sa 2½ (ISO 8501-1) / SP 10 (SSPC).

### Maintenance and Repair

- Spot abrasive blasting to min. PSa 2½ (ISO 8501-2) / SP 10 (SSPC).
- A uniform anchoring profile should be achieved by suitable surface preparation method(s).
- Remove laitance and efflorescence by water jetting, abrading or blasting.
- Moisture content in the surface must be below 4%.
- Level the surface with suitable filler.

### Roughness

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

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

## Application

### Mixing ratio

Base 359A6 : Curing Agent 978AR  
(69 : 31 by weight)

### Cleaner

Hempel's Thinner 08450

### Pot life

Product temperature	20°C [68°F]
Pot life	30 min

### Application method

Tool	Thinning max vol.	Application parameters
Airless spray	20%	Nozzle pressure: 175 bar [2500 psi] Nozzle orifice: 0.017-0.021"
Roller	10%	Not Applicable.
Trowel	10%	Not Applicable.
Trowel	0%	Not Applicable.

Keep thinning at an absolute minimum. Up to 10% of Hempel's Thinner 08450 could be added when used as a primer. 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	60 micron [2.4 mils]	80 micron [3.1 mils]	75 micron [3.0 mils]
Wet film thickness	60 micron [2.5 mils]	80 micron [3.5 mils]	80 micron [3 mils]
Theoretical spreading rate	16 m²/L [650 sq ft/US gal]	12 m²/L [490 sq ft/US gal]	13 m²/L [530 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.

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## Application conditions

- Surface temperature must be above 10°C [50°F] during application and curing.

## Application remarks

- Mixing ratio (Kg), according to its use; Hempel's Primer 359AR: Silica type F or G\* (particle size 0.1-0.4mm or 0.7-1.3 mm): Primer 1:0 / Smoothing coat 1:1 / Mortar 1:2,5
- Recommended DFT (dry film thickness), according to its use: Primer: 75-80 microns DFT per coat / Smoothing coat: 1-1.5mm DFT per coat / Mortar: 4-6mm DFT per coat
- Consult for availability of Hempel Quartz 675AR

## Drying and overcoating

### Product compatibility

- Previous coat: None.
- Subsequent coat: None or according to Hempel's specification. Recommended product is: Hempadur Resin HB 35860

### Drying time

Surface temperature		20°C [68°F]
Surface dry	hours	6
Through dry	hours	8
Fully cured	days	7

Determined for dry film thickness 75 micron [3.0 mils] at standard conditions, see Hempel's Explanatory Notes for details.

### Overcoating

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

Quality name		20°C [68°F]
Atmospheric medium		
Hempel's Primer 359AR	Min	3 h
	Max	72 h
Hempadur Resin HB	Min	6 h
	Max	72 h

## 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]
Base	36 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. Storage at elevated temperatures may reduce shelf life. For advice, please consult Hempel.

### 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.

## Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	9.9 g CO <sub>2</sub> e/m <sup>2</sup>	0.051 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.

# Hempel's Primer 359AR

## 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.

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.