

# Product Datasheet



**AkzoNobel**

Tomorrow's Answers Today

## Powder Coatings

### Resicoat<sup>®</sup> R4-ES

for Electrostatic Spray Application on Preheated Surfaces

Code: HJF42R

#### Product Description

Resicoat<sup>®</sup> R4-ES HJF42R Blue is a high quality thermosetting epoxy powder coating for the corrosion protection of valves and fittings, manufactured from cast iron or steel. The powder coating is available to be applied in one layer on a preheated surface by electrostatic spray application or fluidized bed application. Typical film thickness achieved is in the range of 250 – 500 µm. The resultant thermoset epoxy has a high mechanical resistance with excellent electrical insulation properties. Drinking water approvals are available to confirm the coatings suitability, as a hygienic and environmental friendly coating. The outstanding adhesion of Resicoat R4<sup>®</sup> epoxy powders to the metal substrate provides long term protection of the coated component. It ensures a reliable conservation to the function and value of the parts for the common water and gas distribution network. The applicator of Resicoat<sup>®</sup> R4 benefits from a modern and environmentally friendly process.

#### Powder Properties

	Typical value	Method
Binder system	Epoxy resin	
Density	1.45 – 1.55 g/cm <sup>3</sup>	ISO 8130-2
Gel time at 200° C	25 – 40 sec.	ISO 8120-6
Storage stability	4 months from delivery date at ≤ 23° C	
MSDS	PC 508	

#### Application Data

Preheating temperature	200 – 220° C object temp.
Post cure conditions	self curing on 8 mm steel at above temp.
Particle size distribution	< 32 µm = 35 – 50 % < 160 µm > 95 %

#### Material Properties

Colour	blue, approx. RAL 5017	
Recommended film thickness	250 – 350 µm	
Flow	smooth	
Gloss at 60° angle	70 – 90 sec.	DIN 67530
Cross cut test	Gt 0	DIN EN ISO 2409
Impact resistance	> 5 Joule	DIN 30677-2
Dielectric strength	≥ 30 kV/mm	DIN 30677-2
Elongation	> 5 %	DIN 30671
Hardness	> 100	DIN EN ISO 2815
Cathodic disbonding	< 10 mm	ASTM G 8-92, 168 h
Hot water immersion, 90° C, 4 weeks	no visible change	
Adhesion after 7 days, 90° C water	> 16 MPa	acc. DIN EN ISO 4624, GSK

#### Drinking Water Approval

ANSI/NSF 61 Drinking Water System Components - Health Effects

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Authorized by: GK

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Disclaimer: This Product Data Sheet is based on the present state of our knowledge and on current laws. The data referring to Powder Properties, Application Data and Physical Tests is based on lab based samples. Factors such as quality or condition of the substrate may have an effect on the use and application of the product. It remains the responsibility of the user to test thoroughly if the product is applicable for the intended use. The use of the product beyond our recommendation releases us from our responsibility, unless we have recommended the specific use in writing. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. We are not liable for any application-technological advice. The Product Data Sheet shall be updated from time to time. Please ensure you have the latest version before using the product. All products and Product Data Sheets are subject to our standard terms and conditions of sale (GCS). You can receive the latest copy of GCS via internet or our post address. Brand names mentioned in this Product Data Sheet are trademarks of or are licensed to the AkzoNobel group.

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