

Technical Data Sheet

ROVAL ZC Galvanizing Repair Metallic Spray



Description

Ideal for simple repairs of galvanized surfaces. The silver sheen color of ZC blends in with the color of hot-dip galvanized surfaces. 69% zinc in its dry film provides effective anti-corrosion performance and the aluminum pigments creates barrier protection. Suitable for repairing un-galvanized surfaces and for small touch-ups.

Aerosol product

Components	Zinc powder Aluminum Binder Aromatic thinner
Internal capacity	Aerosol 420 ml
Painting area	1 m ² (2 coats)
Packaging	24 cans / case
Application Conditions	Temperature 5 - 40 °C, Humidity < 85% The metal substrate temperature < 50 °C
Shelf life	3 years

Dry film

Color	Silver
Gloss	Glossy
Zinc content	69% (± 1%) by weight, use zinc ingot with a purity of 99.995%. ZC conforms to the standard ASTM A780 in regard of its use as repair coating for hot-dip galvanizing.
Dry film thickness	40µm (20µm x 2 coat)
Drying time	For 20µm DFT at 20 °C, humidity 65% condition >> Touch dry and overcoating: 20 min >> Fully cured: 24 hours

Surface Preparation

ZC requires direct contact between the zinc dust in the film and the metal substrate for optimum performance. Since the surface must be dry and free of any other paint and contaminants, employ adequate methods to remove them thoroughly.

Salt	Use high pressure washing to remove salt deposits.
Oil	Wipe off perfectly with solvent rags.
Red rust, Old paint film Welded part	ISO 8501 St3 Use a power tool to expose a clean metal surface.
Galvanized surface (Only white rust)	ISO 8501 St2 Use a hand tool to remove white rust.

Adequate agitation of products

Shake the aerosol can 30 times or more before use, because ZC contains a lot of powdered zinc, the contents may settle at the bottom of the can.

Coating method

Do not apply thick coat at once, but apply in two steps.

It is highly recommended to use **ROVAL cold galvanized compound** as a primer when using ZC for anticorrosion pretreatment in harsh corrosive environments.

Properties

Test item	Method used	Result
Hardness	JIS K5600-5-4:1999 (ISO/DIS 15184:1996) Pencil scratching	Pencil 5B
Adhesion	JIS K 5600-5-6:1999 (ISO 2409:1992) Peel off a sticky tape on 25 cells check pattern (square: 1mm x 25)	No abnormality
Heat resistance	Electrical constant temp. drier 90 °C, 24 hours	No abnormality
Cold resistance	Low temp. cycle test for 72 cycles <1 cycle> Left at -30 °C for 5 hours and Left at +10°C for 1 hour	No abnormality
Salt spray	JIS K 5600-7-1:1999 (ISO 7253:1984) 5% NaCl (pH6.5~7.2) Temp of spray chamber: 35±1°C	360 hours No abnormality other than white rust