

Technical Data Sheet

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ROVAL® SILVER Zinc Rich Compound

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DESCRIPTION

ROVAL SILVER (hereinafter called "RS") is a single pack type high quality liquid organic zinc rich compound. The dried film of RS has a 83% high zinc (ASTM D520 type II) content and aluminum powders. It provides long-lasting galvanic anti-corrosion protection to metals along with the silver color surface.

PROPERTIES

▲ High anti-corrosion performance——Cathodic Protection
Unlike normal paints, which only provide barrier protection, ROVAL products
also provide cathodic protection on steel and ferrous metals. If rust occurs, it will
not creep under the film. The anti-corrosion performance is dependent upon the
content of zinc in the compound and the film thickness.

▲ Cathodic and Barrier Protection------Self healing

The zinc is sacrificed as it offers cathodic protection. In turn zinc corrosion products are formed, which cause the coating film become denser and more impervious to damaging elements. This restorative action makes the coating resistant to weather, water etc... If the coating film is damaged, fresh zinc is primed to provide galvanic action.

▲ Single pack type----- Easy to mix, Easy to paint

Unlike other paints, which have two or three components, ROVAL products are a single pack zinc rich compound. There is no limited pot life, no complex mixing methods, and no painting skills required. This product simply requires thorough mixing and sufficient film thickness is obtained, it is very easy to use.

▲ Weathering ———Due to exposure, the film weathers same as galvanization RS possesses the similar weathering characteristics as galvanization. It is one of the most suitable compounds for touch-ups of damaged galvanized surfaces.

▲ Electric Conductivity

Roval products are not necessarily conductive paints, but they may conduct the static electricity from a human body, to the steel or ferrous metals underneath the film.

▲ Color match for galvanized surface

RS is the perfect repair compound on hot-dip galvanized materials because its silver surface color blends in with the color of galvanized surface. RS also can be used as a topcoat on RHB or R22.

Topcoat

RS can be used as a topcoat on R, RHB, or R22. We do not suggest topcoat on RS.

APPLICATIONS

This product can be used extensively in the maintenance and restoration of damaged or worn galvanized metal and for the long term anti-corrosion protection of steel/iron structures or equipment.

TECHNICAL DATA

Color Silver
 Specific Gravity 1.70±0.05kg / L
 VOC 655g / L (5.47lbs / gal)
 Theoretical Coverage 2m² or 21.5ft² / kg (dft = 3.2mil)

• Recommended Film Thickness 3.2mil or 80µm

• Heat-Resistance Continuous 212 °F (100°C) max

Non-continuous 338 °F (170°C) max

• Cold-Resistance

• Dry to Touch Time

• Recoat time

Non-continuous 338 °F (170°C) max

-76 °F (-60°C) for 1008hrs

20-30mins (at ambient temperature)

(2nd coat of RS) 3-6 hrs

(Optional topcoat) We do not suggest.

• Pencil hardness: 3B

(Hardness will be improved after exposure.)

Cross cut test: 100 / 100
Impact resistance: 500g 1/2"×50cm
Salt Spray Test 1200 hours

Exterior Exposure: 10 years no rust happened.

 \bullet Application Conditions Temperature 41 °F \sim 122 °F Humidity < 85%

• Shelf life: 3 year (Sealed can when stored properly)

* Can be used after being re-evaluated even post shelf life.

DIRECTIONS

-Surface Preparation

ROVAL SILVER must be applied directly to steel or galvanized surfaces. If old paint exists on the surface to be painted, please remove it, or it will compromise the anti-corrosion performance.

Steel/Iron surfaces:

Clean the surface to be free of all grease, oil, loose rust, and other foreign contaminants, especially marine salt. In a high corrosive environment, or if high anti corrosion performance is required, the following is recommended:

- · Sandblasting to ISO Sa 2 1/2 or SSPC SP-10 is sufficient.
- · Surface profile should be Rz30μm 70μm.
- · Salt deposit density should be below 50mg / m².

Under normal atmospheric environments, or if sandblasting cannot be used, the following is recommended:

- · Power tool clean to ISO St3 or SSPC SP-3 is sufficient.
- · Surface profile should be Rz30μm 70μm.
- · Salt deposit density should be below 50mg / m².

Galvanized surface:

Clean the surface to be free of all grease, oil, salt, loose rust and other foreign contaminants.

Rub the zinc salt with sandpaper to ISO St2 or SSPC SP-2. Salt deposit density should be below 50mg / m².

Rovalized surface:

Clean the surface to be free of all grease, oil, salt, loose rust and other foreign contaminants.

Rub the zinc salt with sandpaper to ISO St2, SSPC SP-2. Salt deposit density should be below $50 \text{mg} / \text{m}^2$.

NOTE: Coating must be done within two hours after surface preparation.

MIX

Because of the high content of zinc powder, sediment is easily produced during storage. So before using it, sufficient agitation is essential. Be certain that there is no sediment at the bottom of the can.

Also, the product must be constantly agitated while in use.

APPLICATION

Brush/Roller: Use a good quality soft brush which can absorb

plenty of paint. Do not over extend the film or leave brush marks while painting. Leave adequate

DFT. Do not dilute. <u>Conventional Spray</u>: Size of Tip Orifice --- 1.5-2.0 mm

Atomized Air Pressure--- 0.29MPa Dilute thinner under 5 % (weight)

Airless Spray: Pump--- 30:1 Ratio

Size of Tip Orifice --- above 0.48-0.63 mm

Atomized Air Pressure--- 10MPa

Dilution not required.

PACKAGING

1.5kg (3.3 lbs): 4 cans / case 20kg (44.1 lbs): 1 pail / unit

PRODUCTION NUMBER

Sample: [W C S 09 06 25 C]

WCS: Product Code; 09: Year; 06: Month; 25: Day;

C: Batch Number (A:1st, B:2nd, C:3rd...)

^{*}The data given herein is based upon Roval experience and knowledge, and is not covered under any guarantee or warranty.