



Galvany IZ180(N) (Two-Component)

Product Description A self-curing inorganic zinc primer consisting of a basic zinc silicate complex. It protects the substrate from corrosion with cathodic protection mechanism. It shows outstanding workability during application and excellent resistance against weathering and high temperatures up to 400 °C/752 °F.

Recommended Use It can be applied as single coating system for steel protection under severe corrosive conditions, including marine atmosphere and heavy duty service. Under more severe corrosive atmosphere, it is recommended as a base coat for organic and inorganic topcoats. It can be used widely in chemical plants, paper mills, refineries and coastal or salt atmospheres. Not recommended for immersion or direct exposure against acid or alkalis without suitable topcoats.

Physical Properties

Finish and Color Flat. Grey (1184)

Drying Time At 20 °C/68 °F, 65 % R.H.,
Set to touch : 20 ~ 30 min (Tolerates light showers after 1 h)
Fully cured : 24 h
* The actual drying time is subject to the film thickness, ventilation, humidity etc., and drying time under other temperature conditions should be checked and informed by KCC.

Solids by Volume Approx. 63 %

Theoretical Spreading Rate 10.5 m²/L in 60 μm, dry film thickness on a smooth surface

Specific Gravity Approx. 2.5 for Mixture of Base and Zinc-filler

Flash Point Base [IZ180(N)] : 13 °C/55 °F (Closed cup)
Zinc filler : N/A

Application Details

Surface Preparation Remove any oil, grease, dirt and any other contaminants from the surface before painting by proper method such as solvent cleaning and fresh water washing, etc.
* Blast cleaning to Sa2.5 and/or Sa3 to obtain 25 ~ 75 μm blast profile.
* Weld seams, burned and rusty areas after application of main inorganic zinc coating : Blast cleaning to Sa2.5 and/or Sa3 and/or power tool cleaning to St3 (Disc grinding with 16mesh sized disc sander).

Application Conditions The surface should be completely cleaned and dried. The surface temperature should be at least 2.7 °C (5 °F) above dew point to prevent condensation. In confined spaces, provide adequate ventilation during application and drying. Temperature during application and curing is preferably from -18 °C/15.8 °F to 49 °C/120 °F. This limit applies to the temperature of the surface and that of paints itself.

Mixing Base : Zinc Filler = 14.25 kg : 31.53 kg
Pour the Zinc filler slowly into the Base with constant mechanical stirring as delivered proportion, and strain the mixture through a screen with 30~60 mesh.

Disclaimer : The information in this data sheet is believed to the best of our knowledge based on laboratory test and practical experience. However, there are many factors affecting the performance of product and the product quality itself, so we are not able to guarantee without the confirmation of the purpose of using the product from us in writing. We reserve the right to change the data without notice and you should check that this data sheet is current prior to using the product.



KCC Corporation

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Pot Life 8 h at 20 °C/68 °F and R.H. 65 %.

Thinning Thinner No. 0608 : For normal conditions.
Thinner No. 0614 : For hot (above 25 °C/77 °F) or windy conditions.

Application Method Spray (Airless or Air) application.
For airless spray application :
Nozzle orifice : 483 μm ~ 635 μm (0.019" ~ 0.025")
Output pressure : 6.2 MPa ~ 13.8 MPa
Fan : 40 ° ~ 65 °
(Airless spray data are indicative and subject to adjustment)

Typical Film Thickness 75 μm dry.

Recoating Interval (With Others) At 20 °C/68 °F and above R.H. 65 %, Minimum : 24 h
Maximum : Free

Before overcoating after exposure in contaminated environment, clean the surface with suitable cleaning methods such as high pressure fresh water hosing, solvent cleaning, etc., and allow to dry thoroughly.

Subsequent Coat Korepox, Kovinyl, Korabor system, or other proper top coats can be applied as topcoat of Galvany IZ180(N).
In some cases, a "mist coat" is required to prevent application bubbling.

Shelf Life 12 months

Heat Resistance Continuous : 400 °C / 752 °F (Non-immersion service)
Non-continuous : 427 °C / 800 °F (Non-immersion service)

Chemical Resistance

| | Acids | Alkalies | Solvents | Salts | Water |
|-------------------|-------|----------|-----------|-----------|-----------|
| Splash & Spillage | Fair | Fair | Excellent | Excellent | Excellent |
| Fumes | Good | Good | Excellent | Excellent | Excellent |
| Immersion | NR | NR | Excellent | Excellent | Excellent |

*NR : Not Recommended

Standard Packing Unit Base : 14.25 kg
Zinc filler : 31.53 kg

Remarks Protect skin and eyes from direct contact with liquid paint, and avoid prolonged breathing of solvent vapors.
Use with adequate ventilation.
Respiratory protection is recommended during application in confined spaces or stagnant air.

Issued December 2011

Application instruction

IZ180(N)

Galvany IZ180(N) is specially designed self-curing type zinc silicate coating for long-lasting protection of steel substrate against corrosion.

It has outstanding weathering and abrasion resistance performance, excellent chemical resistance, acid and alkali resistance within the PH 6~9 range and it withstands high temperatures up to 400 °C/752 °F.

It is applied on the blast-cleaned steel.

* Packing *

Galvany IZ180(N) is supplied as two separate component. (Base and Zinc filler in the correct proportion for the mixture)

Do not open package until use. The each package (Base and Zinc filler) must be used entirely for mixing to ensure the mixing ratio.

Left-over in the packages cannot be used.

* Shelf life *

Base : 12 months, Zinc Filler : 12 months

* Mixing *

Liquid : Zinc Filler = 14.25 kg : 31.53 kg

A. Mix with supplied mixing ratio only. Do not vary or subdivide.

B. Before mixing, shake or stir the Base very thoroughly.

C. Pour the Zinc filler slowly into the Base with constant mechanical stirring.

Do not mix in reverse order.

Continues stirring until mixture is free of lumps.

D. Strain the mixture through a screen 30~60 mesh.

* Pot life *

8 h at 65 % R.H., 20 °C/68 °F.

(It may be shortened under higher relative humidity and temperature).

* Application condition *

Temperature during application and curing is preferably from -18 °C/0 °F to 49 °C/120 °F.

This temperature condition is for the substrate and surrounding air.

* Surface preparations *

Remove any oil and grease, dirt and any other contaminants from the surface before painting by proper method such as solvent cleaning and fresh water washing, etc..

* Blast cleaning to Sa2.5 and/or Sa3 to obtain 25~75 microns blast profile.

* Weld seams, burned and rusty areas after application of main inorganic zinc coating : Blast cleaning to Sa2.5 and/or Sa3 and/or power tool cleaning to St3(Disc grinding with 16 mesh sized disc sander).

* Thinning *

May be diluted up to 10 % by volume.

-. For normal conditions : Thinner No. 0608.

-. For hot (above 25 °C/77 °F) or windy conditions : Thinner No. 0614.