

ZD Cold Galvanizing Compound (ZINDN)

Description

ZINDN is a single component high solid heavy-duty metallic coating, consists of zinc powder, fusion agent, and solvent.

Features :

- Metallic coating with 96% zinc powder in its dry film, providing both active cathodic and passive protection of ferrous metals.
- Zinc Purity: 99%
- Used by single layer or complex coatings.
- Convenient application and Eco-friendly.

Recommended use

- Dry film zinc content 96%, with same anti corrosion performance to hot dip & thermal spray zinc.
- Used as the touch up for zinc layer damage in traditional galvanizing processes.
- Applied by single layer or primer with ZD middle coat & topcoats to meet various protection requirements even in C5VH corrosion grade.

Physical Constants

- ◆ Single pack
- ◆ Zinc content in dry film: 96%
- ◆ Zinc purity: 99%
- ◆ Pack: 25kg/pail
- ◆ Color: zinc gray
- ◆ Gloss: matt
- ◆ Volume solids: 51%
- ◆ Density (kg/L): 2.7
- ◆ Recommended dry film thickness: 60-120um
- ◆ Theoretical coverage rate: 0.424kg/m² (80microns DFT)
- ◆ Practical coverage rate: consider the appropriate loss factor
- ◆ Volatile Organic Compound (VOC): ≤475gms/ltr

Application Instructions

Substrate and surface treatment

Steel: blast cleaned to Sa2.5 (ISO8501-1) or minimum SSPC SP-6, blasting profile $Rz40\mu m \sim 75\mu m$ (ISO8503-1) or power tool cleaned to minimum ISO-St3.0/SSPC SP3

Touch up of galvanized surface

Thoroughly remove grease on the surface by the cleaning agent, clean off salt and other dirt through high-pressure fresh water, use a power tool to polish the area of rust or mill scale, and then apply with ZINDN.

Application & curing conditions

- ✧ Pot life: unlimited
- ✧ Application environment temperature: $-5^{\circ}C - 50^{\circ}C$
- ✧ Relative air humidity: $\leq 95\%$
- ✧ Substrate temperature during application and curing should be at least $3^{\circ}C$ above dew point
- ✧ Outdoor application is prohibited in severe weather such as rain, fog, snow, strong wind and heavy dust
- ✧ The temperature is high in summer, be careful with dry spraying, and keep ventilated during application and drying periods in the narrow spaces

Product mix

ZINDN is a single component. When using, use an electric stirrer to stir evenly at the bottom of the barrel, and add an appropriate amount of thinner to adjust to the appropriate application viscosity.

Thinner: ZX-01

Application methods

Airless spray /air spray/brush/roller

Brush and roller coating are only recommended for stripe coat, small area coating or touch up.

Application parameters

Application method	Unit	Airless spray	Air spray	Brush/Roller
Nozzle orifice	mm	0.43~0.53	1.5~2.5	—

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Nozzle pressure:	kg/cm ²	150~200	3~4	—
Thinner	%	0~5	5~10	0~5

Drying/curing (@60um DFT)

Substrate temperature	5°C	15°C	25°C	35°C
Surface-dry	2 hrs.	1 hr.	30 mins	10 mins
Through-dry	5 hrs.	4 hrs.	2 hrs.	1 hr.
Recoating time	2 hrs.	1 hr.	30 mins	10 min
Consequent coat	36 hrs.	24 hrs.	18 hrs.	12 hrs.
Recoating time	Surface should be clean, dry and free of zinc salts and pollutants before recoating.			

The coating has fully cured and reached its designed physical and chemical properties in 48 hours under the required temperature and humidity conditions.

Preceding & consequent coat

Preceding coat: Spray directly on the surface of steel or hot-dip galvanized or hot-sprayed steel with the surface treatment of Sa2.5 or St3.

Consequent coat: ZD Sealer(intermediate coat)、ZD metal sealer(silver topcoat)、ZD Zinc- Aluminum topcoat, ZD Aliphatic Polyurethane , ZD Fluorocarbon, ZD Acrylic polysiloxane etc.

Packaging and storage

Packing: 25kg

Flash point: >47°C

Storage : Must be stored in accordance with local governmental regulations. The storage environment must be dry, cool, well ventilated and away from heat and fire sources.

The packaging container must be kept tightly closed.

Shelf life: Unlimited,

Health, safety and environmental protection:

This product contains flammable materials, and the safety of the application site should comply with relevant national or local government regulations. Please pay attention to the safety label on the

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package and read the product safety data sheet (MSDS).

Avoid inhaling solvent vapor and paint mist, avoid paint contact with skin and eyes, strictly forbid swallowing this product, and take necessary precautions and protective measures to prevent fire, explosion and protect the environment. Use this product in a well-ventilated environment. For application in confined or poorly ventilated places, strong ventilation must be provided.

Waste disposal must comply with relevant national or local government regulations.

Statement

This product information and data are accumulated based on our experience in testing lab and actual use, and can be used as a application guide. However, because the use of the product is usually outside our control, we only provide a guarantee of the quality of the product itself. Our company reserves the right to make modifications based on continuous product improvement without prior notice.

ISSUED BY: ZINDN