



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. With special high build formulation, it can be applied up to 175 microns of D.F.T. in single coat without mud cracking. Approved for high performance on Slip&Creep by CCC&L, IZ180(N) contains 86% zinc by weight in the dry film. Conforms to SSPC Paint 20 Level 1.

<b>Recommended use</b>	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.
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Physical Properties	
<b>Finish and Color</b>	Flat. Grey (1184)
<b>Specific gravity</b>	Approx. 2.4 ~ 2.6 for Mixture of Base and Zinc-filler
<b>Solids by volume</b>	Approx. 63 %(Determined by ISO 3233)
<b>Spreading rate (Theoretical)</b>	8.4 m <sup>2</sup> /L in 75 μm, dry film thickness on a smooth surface
<b>Flash point</b>	Base [IZ180(N)LIQUID-1184]: 13 °C/55 °F (Closed cup)
<b>Volatile Organic Compounds(VOC)</b>	Korea Clean Air Coservation Act(including maximum dilution ratio) : 549 g/L (Determined by KS M ISO 3251)

Application details	
<b>Surface preparation</b>	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.  * Steel : Blast cleaning to Sa2.5 and/or Sa3 to obtain 25 ~ 75 μm blast profile. * Shopprimer (approved inorganic zinc silicate) applied steel : Blast cleaning to Sa2.5 or Sa3 on welds and damaged parts. Sweep blast cleaning to Sa1 to remove zinc salts and contaminants. * Other shopprimer applied steel : Blast cleaning to Sa2.5. * 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).
<b>Method of application</b>	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)
<b>Mixing</b>	Base(IZ180(N)LIQUID-1184) : Zinc Filler(for IZ180(N)LIQUID-1184) = 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.
<b>Thinning</b>	Thinner No. 0608 : For normal conditions. (Max. 10% by volume)

	Thinner No. 0614 : For hot (above 25 °C /77 °F) or windy conditions.
<b>Application conditions</b>	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.

<b>Film thickness</b>	75 µm dry.
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<b>Drying time</b>	Substrate temperature	5°C / 41°F	10°C / 50°F	20°C / 68°F	30°C / 86°F
	Set to touch	4 h	2 h	30 mins	30 mins
	Dry through	30 h	26 h	24 h	20 h
	Recoating Interval (Min)	30 h	26 h	24 h	20 h
	Recoating Interval (Max)	Free	Free	Free	Free
<p>* 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.</p> <p>* Before overcoating, remove the oil, salt, chalking material and any other contaminants on aged coating film completely by proper cleaning method such as solvent cleaning and / or fresh water washing.</p>					

<b>Subsequent Coat</b>	<p>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.</p> <p>* Method of Mist Coat</p> <p>1) The Mist Coat proceed to less than 30% thinning ratio and need to proceed by minimized overlap ratio. Also when proceed main coat, preferentially confirm the appearance.</p> <p>2) In the case of the bubble phenomenon (Popping phenomenon) that occurs during the subsequent coating of inorganic zinc, may vary depending on the painting conditions and the site conditions. Please contact TSD and the technical department when checking the problem.</p>
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<b>Pot life</b>	8 h at 20 °C/68 °F and R.H. 65 %.
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<b>Heat resistance temperature</b>	<p>* Untopcoated</p> <p>- Continuous : 400 °C / 752 °F (Non-immersion service)</p> <p>- Non-continuous : 427 °C / 800 °F (Non-immersion service)</p> <p>* With recommended high heat topcoats</p> <p>- Continuous : 540 °C / 1004 °F (Non-immersion service)</p> <p>(Topcoats is that high temperature silicones and other coatings)</p>
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<b>Storage and package</b>	
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<b>Shelf life</b>	12 months (77°F / 25°C)
<b>Storage</b>	Do avoid humidity and direct light.
<b>Packing Unit</b>	Base (IZ180(N)LIQUID-1184): 14.25 kg Zinc filler (for IZ180(N)LIQUID-1184) : 31.53 kg

<b>Remarks</b>	
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<b>Note</b>	* Protect skin and eyes from direct contact with liquid paint, and avoid prolonged breathing of solvent vapors.
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- \* Use with adequate ventilation.
- \* Respiratory protection is recommended during application in confined spaces or stagnant air.
- \* Note that the storage period may be shortened when exposed to high temperatures.

<b>1'st issue</b>	2016-04-01
<b>Revision</b>	2020-05-26

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.

