

# DHDC-1800R

## Inorganic zinc rich primer



This paint is an ethyl silicate inorganic zinc rich primer containing a high concentration of zinc dust (more than 85% of dry film weight). A completely dried film is formed to be a 100% inorganic film and prevents pinholes and rust due to flames on the film. Moreover, since zinc dust forms an inorganic zinc coating by attaching to the base, it shows excellent anti-corrosive properties, oil resistance and heat resistance (400°C). This product satisfies ASTM D 5144 and SNE 5144 specifications of protective coating technology criteria for nuclear power plants.

### Usage

Anti-corrosive steel primer for nuclear power plants  
Anti-corrosive primer for steel structures, marine structures, tanks, pipes, etc. under severely corrosive conditions

### Specification

Paint type	Zinc powder / Ethyl silicate		
Drying time	Category	5°C	20°C
	Set-to-touch	40 minutes	30 minutes
	Dry-hard	4 hours	2 hours
	Over-coat (Max.)	48 hours	24 hours
	Pot life	8 hours	6 hours
Thinner	DR-610 (Cleaning thinner : DR-660)	Dilution ratio	> Airless, spray coating: less than 5%
Specific gravity	Approx. 2.3		
Theoretical Coverage	8.7 m <sup>2</sup> /ℓ (1time - 75μm)	Solid volume ratio	Approx. 65±1%
Color	Metal zinc gray	Thickness of dried film	75μm
Mixing ratio	Binder(A)/Powder(B)=3/1 (Volume ratio)	Flash point	At least 20°C
Gloss	Matte	Shelf life	12 months (well-ventilated dry, cold and dark location)

### Product Properties (Physical Property Data)

Inorganic zinc primer	An inorganic zinc rich primer for steel suitable for harsh corrosive environments. (satisfying the protective coating technology criteria for nuclear power plants)
Excellent film property	Anti-corrosive properties, heat resistance, oil resistance and solvent resistance are excellent

### How to Use

Surface treatment	<ol style="list-style-type: none"><li>1. Completely remove oil, moisture, sand, dust, and other foreign matter from the surface to be coated. The degree of surface treatment to obtain an excellent steel protection effect should be at least SSPC-SP 10 or Sa2.5 (near white metal blast cleaning). The surface roughness should not exceed 75 μm. - Note that adhesion may be weak at a surface treatment grade of SSPC-SP 10 or less.</li><li>2. For steel, apply immediately after surface treatment.</li></ol>
Coating Method	<ol style="list-style-type: none"><li>1. Although coating can be done by either brush or airless spraying, airless spray coating is best.</li><li>2. Airless spray coating:<ul style="list-style-type: none"><li>- Tip diameter : 0.015"~0.021"</li><li>- Injection pressure : More than 2500 P.S.I(176kg/cm<sup>2</sup>)</li><li>- Store the coating equipment after cleaning with an exclusive thinner immediately after use.</li></ul></li><li>3. Brush and roller coating should only be used on damaged parts of the coating and should not be repeated more than once.</li></ol>
Preceding & Follow-up Coating	<ol style="list-style-type: none"><li>1. Follow-up coating: Applicable to 2K epoxy system, vinyl system, and chlorinated rubber system - Upon follow-up coating, be sure to use a "mist coat" to prevent bubbling.</li><li>2. Unsuitable follow-up coating: Oil-based top coats (ready mixed paint, air-drying enamel, etc.)</li></ol>
Remarks	<ol style="list-style-type: none"><li>1. Before use, thoroughly stir the binder to make it uniform and use after slowly mixing the powder and sufficiently stirring (After stirring, filter with a 30-60 mesh).</li><li>2. Continue stirring to avoid sedimentation during use. Excessive dilution is prohibited.</li><li>3. Due to the nature of the paint, self-re-coating is impossible. if re-painting is required due to lack of paint, use epoxy zinc paint.</li><li>4. Product with similar specifications : SSPC-Paint 20</li></ol>