# Technical Data

## ZINCTECT 1000

### GENERIC TYPE
Pre-construction Primer

### DESCRIPTION
Inorganic zinc rich shop primer for steel plates and shapes based on alkyl silicate binder and zinc powder

### RECOMMENDED USE
Steel structure at marine or industrial severe corrosive environment

### FEATURES
- Quick drying
- Excellent shop coat line applicability
- Excellent anti-corrosive performance
- Excellent resistance to weathering, resistance to oil and resistance to organic solvents and heat resistance
- Conform to JIS K 5552 Type 1

### PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Colour</th>
<th>Grey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish</td>
<td>Matt</td>
</tr>
<tr>
<td>Volume Solids</td>
<td>52 %</td>
</tr>
<tr>
<td>Typical Thickness</td>
<td>Dry : 15 microns / coat</td>
</tr>
<tr>
<td>Theoretical Coverage</td>
<td>34.3 ml/L at 15 microns DFT</td>
</tr>
<tr>
<td>Flash Point</td>
<td>10°C (Base)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.30 g/cm³</td>
</tr>
<tr>
<td>VOC</td>
<td>391 g/L</td>
</tr>
<tr>
<td>Temperature Resistance</td>
<td>Non-continuous: 500°C, Continuous: 400°C</td>
</tr>
</tbody>
</table>

*These numerical values are subject to normal manufacturing tolerances, colours and testing variances.

### SURFACE PREPARATION
- All surfaces to be coated should be completely clean, dry and free from contamination.
- Surface preparation method shall be in accordance with ISO 8504: 2000.
- Remove salt and other water-soluble contaminants by fresh water.
- Remove oil and grease with suitable detergent or solvent (SSPC-SP-1).
- Remove rust, mill scale and other loose material completely by abrasive blasting (ISO 8501-1:2007 Sa 2 1/2 or SSPC SP-10).

### APPLICATION
Ambient temperature shall be above 0°C and relative humidity shall be above 50%. Surface temperature shall be a minimum of 3°C above dew point.

**Application Conditions**

**Mixing**
Stir each component with power agitator well before mixing. Then power mix two components.

**Mixing ratio**
Liquid/Powder = 3/7 (by weight)

**Induction Time**
Not required

**Application Method**
Airless spray
- Thinner: SD ZINC 1000 Thinner (0–10% by weight)
- Nozzle pressure: Not less than 10MPa
- Nozzle Tip: No.163–515～621

Brush
- Thinner: SD ZINC 1000 Thinner (0–5% by weight)
- Power mix thinner if required.

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*Too much thinning results sagging and slower cure.*
Clean Up
Clean all the equipment with thinner immediately after use.

Pot Life

<table>
<thead>
<tr>
<th>Temperature</th>
<th>5 °C</th>
<th>20 °C</th>
<th>30 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life</td>
<td>5 hour(s)</td>
<td>5 hour(s)</td>
<td>5 hour(s)</td>
</tr>
</tbody>
</table>
*Use all mixed paint within pot life.

Drying Time

<table>
<thead>
<tr>
<th>Temperature</th>
<th>5 °C</th>
<th>20 °C</th>
<th>30 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface dry</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Touch dry</td>
<td>5 minute(s)</td>
<td>3 minute(s)</td>
<td>1 minute(s)</td>
</tr>
</tbody>
</table>
*Drying time may vary depending on film thickness, ventilation, humidity, undercoat paint condition etc.

Overcoating Interval

<table>
<thead>
<tr>
<th>Temperature</th>
<th>5 °C</th>
<th>20 °C</th>
<th>30 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>24 hour(s)</td>
<td>24 hour(s)</td>
<td>24 hour(s)</td>
</tr>
<tr>
<td>Maximum</td>
<td>10 month(s)</td>
<td>10 month(s)</td>
<td>10 month(s)</td>
</tr>
</tbody>
</table>
*The overcoating intervals are based on overcoating with same or same type of paint.

Typical undercoat
- SD ZINC, ALTECT, EPOMARINE, EPOSEAL, ESCO, MILLION, TEROMO, etc

Typical topcoat
SD ZINC, ALTECT, EPOMARINE, EPOSEAL, ESCO, MILLION, TEROMO, etc

SAFETY PRECAUTIONS
Detail information is given on Material Safety Data Sheet (MSDS). Avoid inhalation of spray mist or vapour. Avoid skin and eye contact. Paint contacted with skin should be immediately removed with water and/or suitable cleanser. Eyes should be flushed with water and seek immediate medical attention. Since this product contains flammable solvents, keep away from sparks and open flames. Application and handling of this product should be in compliance with relevant national regulations.

STORAGE
Store in dry, cool condition and away from sources of heat and ignition. Containers must be kept tightly closed. Store conditions shall be in accordance with national regulations.

SHELF LIFE
6 months from date of production

GENERAL REMARKS
- This product is moisture sensitive and store in cool and dry indoor area.
- Zinc powder in mixed paint tends to sink due to heavy specific gravity. Stir slowly during application to prevent zinc powder settling.
- Contamination of other thinner may spoil paint film formation. Wash spray equipment sufficiently with SD ZINC 1000HA THINNER before using.
- Cracking may occur when total thickness is more than 50 microns by short interval (within 7 days) application.
- Thickness shall be controlled from 15 to 25 microns for ideal cutting welding work.
- Oil and alkyd paint is not suitable for overcoating.
- Wear protection mask and supply good ventilation when cutting and welding work.

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