



VOC Free  
Corrosion Control Coating Material

*Heavy-Duty Coating*

**SAPOE 5000**

*Thermoplastic Polyester Resin Powder Coating*

NTT Advanced Technology Corporation

## ◎ Coating Film Characteristics

### SAPOE 5000...

- is a solvent free, **environmentally friendly** coating material.
- **does not need primer** even on galvanized steel. It also has strong adhesion and **excellent rust protection against salt water damage and various corrosive environments.**
- is a thermoplastic powder coating with **improved alkali resistance** and which **effectively controls ultraviolet ray deterioration** compared to similar previous products.

\* A protective membrane may be needed when immersed in strong alkali conditions of around pH13.

## ◎ Coating Performance Chart

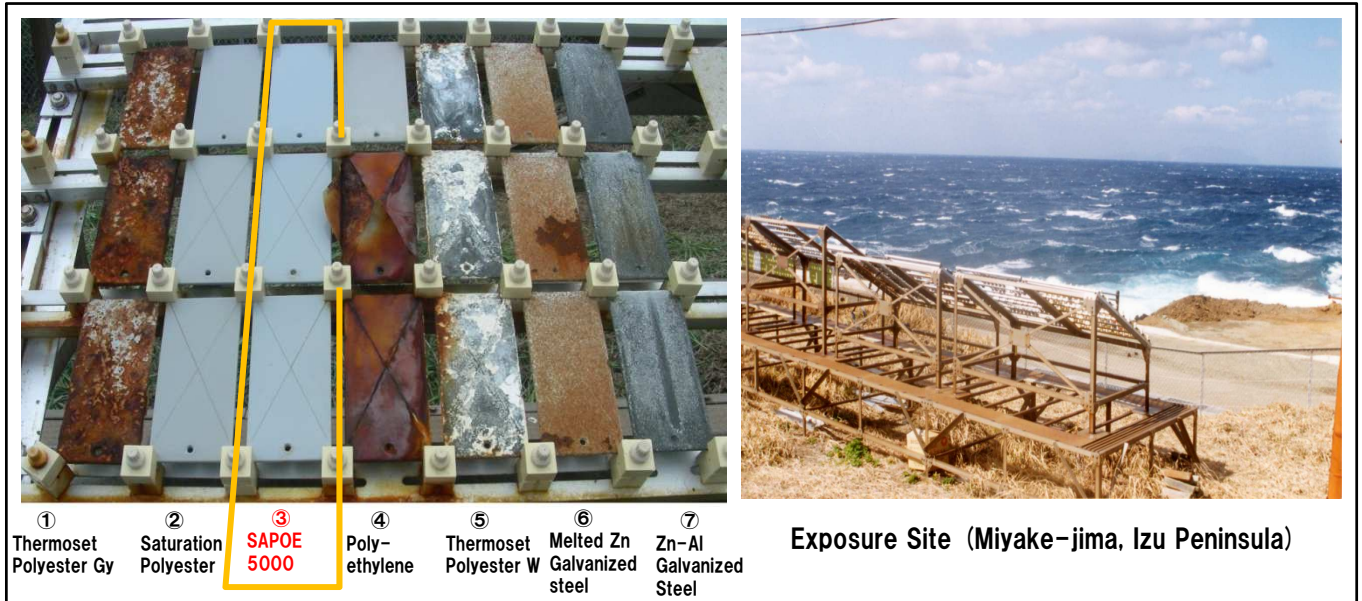
| Item                        |                         | Performance, etc.     | Testing Method, etc.                            |   |
|-----------------------------|-------------------------|-----------------------|---|---|
| Processing Conditions       | Material                | Galvanized sheet iron | In shop coating (On-site coating also possible) |   |
|                             | Preprocessing           | Blast                 |   |   |
|                             | Coating Temperature     | 320°C                 |   |   |
|                             | Immersion Time          | 3 sec.                | Flow-soak method                                |   |
|                             | Cooling                 | Water cooling         |   |   |
| Initial Coating Performance | Thickness               | 250-350 $\mu$ m       |   |   |
|                             | Smoothness              | OK                    | Visual Observation                              |   |
|                             | Luster                  | >90%                  | JIS K 5400 60° Specular Gloss                   |   |
|                             | Hardness                | H - F                 | Pencil Hardness Test                            |   |
|                             | Elastic Strength        | 0.4 kN                | Stretch testing method                          |   |
|                             | Impact resistance       | >30 kg/cm             | E. I. Dupont de Demours shock method            |   |
|                             | Adhesiveness            | 30 kNm <sup>-1</sup>  | Cycas method (interface shear method)           |   |
| Environment Tests           | Acid resistance         | OK                    | 10% HCl 20°C x 30 days                          |   |
|                             | Alkali resistance       | OK                    | 10% NaOH 20°C x 30 days                         |   |
|                             | Salt-fog resistance     | OK                    | JIS K 5400 2000 Hours                           |   |
|                             | Hot water resistance    | OK                    | 80°C x 30 days                                  |   |
|                             | Heat resistance         | OK                    | 80°C x 30 days                                  |   |
|                             | Advanced weatherability | Hue                   | OK  | JIS K 5400 2000 Hours<br>50% luster retention after 500 hours |
|                             |                         | Luster                | OK  |   |
|                             | Outdoor Exposure        | Hue                   | OK  | 1 year of exposure<br>50% luster retention after 1 year       |
| Luster                      |                         | OK                    |   |   |

Judgement criterion: OK = Good

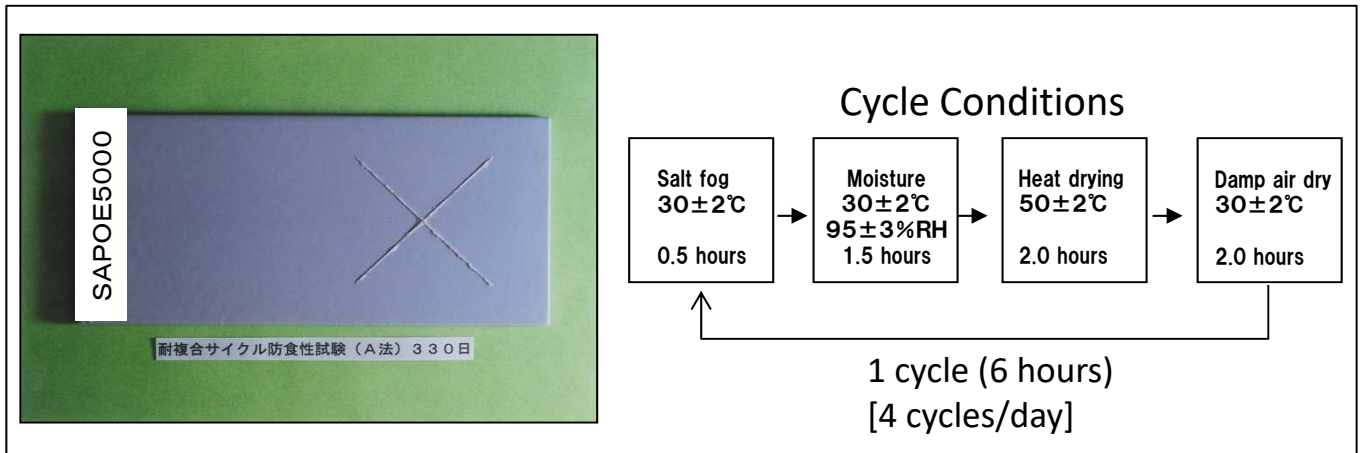
This data shows typical values not standard values

# ◎ Anticorrosion Performance

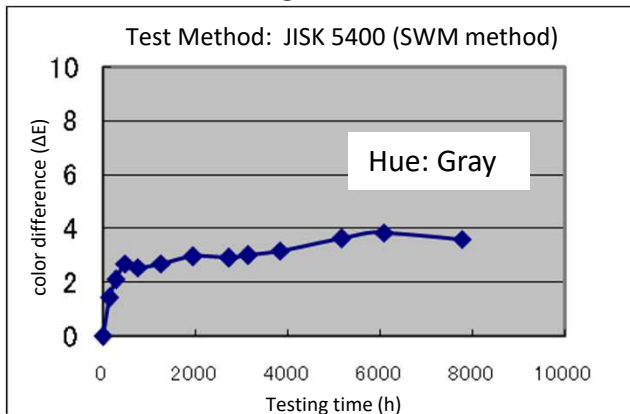
• Outdoor Exposure Test: 8 years



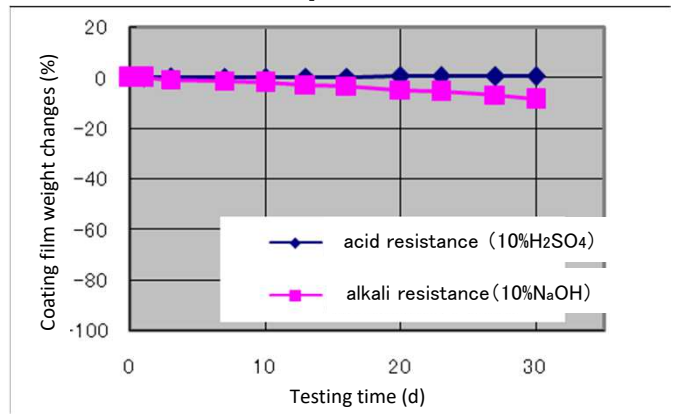
• Complex Cycle Corrosion Resistance Test (Method A) 330 Days (equivalent to more than 10 years outdoor environment)



## ◎ Accelerated Weathering (Color change)



## ◎ Chemical Resistance (Soak Temp.: 23°C)



# ◎ SAPOE 5000 Usage Examples

Steel poles (echo)



(Color change)



Lightweight steel poles (panzer masts)



Hues:



Grey Brown

Bridge Utility Fixtures (Main units)



Bridge Utility Fixtures (additional fixtures)



Anti skid manhole covers



Telephone boxes in tunnels



Distributor

[www.aconoptics.com](http://www.aconoptics.com)

**aconoptics**

ACON OPTICS COMMUNICATIONS INC.

TAIWAN

Wendy

[wendy.fan@aconoptics.com](mailto:wendy.fan@aconoptics.com)

TEL : +886-2-2917-7668 ext.2215

China/Hong Kong/Macau

Lucky

[lucky.fu@aconoptics.com](mailto:lucky.fu@aconoptics.com)

TEL : (+86)18666080060