

# **Water-based Fluoropolymer Coating POLYFLON PTFE EK-3708S21R**

**TECHNICAL DATASHEET** 

# Water-based PTFE topcoat for non-stick property.

#### Introduction

- POLYFLON PTFE EK-3700 grade is a water-based PTFE topcoat.
- POLYFLON PTFE EK-3708S21R makes a gray topcoat layer displaying non-stick property.
- It is good for cooking appliances and kitchen appliances.

#### **Characteristics**

| Film<br>appearance | Viscosity<br>[cP] | рН | Solid<br>content<br>[mass%] | Specific<br>gravity of<br>coating |
|--------------------|-------------------|----|-----------------------------|-----------------------------------|
| Gray               | 260               | 9  | 40                          | 1.3~1.4                           |

### Physical properties of the coating film

| Items                    | Unit              | Data    | Method of measurement ※1         |
|--------------------------|-------------------|---------|----------------------------------|
| Gloss                    |                   | 15 – 25 | JIS K5400 7.6                    |
| Pencil hardness          |                   |         | JIS K6894                        |
| (25°C)                   |                   | H – 2H  | (Stripping hardness of base      |
| (200°C)                  |                   | B - HB  | material)                        |
| Cross-cut adhesion       |                   |         | JIS K5400 8.5                    |
|                          |                   | 100/100 | (Stripping with cellophane tape, |
|                          |                   |         | 10 times)                        |
| Taber abrasion<br>(25°C) | mg/1000<br>rounds | 6 – 12  | CS-17、1kg、1000 rounds            |
| Boiled water resistance  |                   | Good    | for 100 hours at 90~95°C         |
| Salt spray               |                   | Good    | JIS Z2371                        |
| Hot oil resistance       |                   | Good    | for 16 hours at 260°C            |
| Corrosion resistance     |                   | Good    | Corrosion resistance test ※ 2    |

The coating film was evaluated with a test piece below.

Substrate: Aluminum plate roughened with Tosa Emely Extra #80/#100=50/50

Primer: EK-1909S21R, approximately 10µm thick

Topcoat: Approximately 20µm thick

※ 2 Corrosion resistance test (Oden soup stock test): 5 cycles of the following; SB Oden soup stock is dissolved into 1L water and boiled for 1 hour Hot insulation for 7 hours Left unattended for 16 hours

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\* The numeric values above are typical and not guaranteed.

## **Handling method/Safety information**

- Be sure to read the notes on SDS and labels before use.
- This product is intended for general industry, and therefore its adequacy and safety as a raw material for medical purposes cannot be guaranteed.

For more information, visit our website.

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