

# **Water-based Fluoropolymer Coating POLYFLON PTFE EK-3781M21R**

**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-3781M21R makes a gray metallic topcoat layer displaying non-stick property.
- It is good for cooking appliances and kitchen appliances.

### **General physical properties**

Film appearance	Viscosity [cP]	рН	Solid content [mass%]	Specific gravity of coating
Gray metallic	270	9	42	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 (25°C)	mg/1000 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

 $<sup>\</sup>mbox{\%}\ 1$  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

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dissolved into 1L water and boiled for 1 hour Hot insulation for 7 hours Left unattended for 16 hours

\* 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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