#### Edo Bosei EPR

#### **Coating Precautions**

- 1. Do not use the product until you have read the instructions for use provided in the catalogue.
- 2. Using thinner products other than those specified by our company may result in decreased workability or failure to achieve the specified performance.
- 3. Thoroughly degrease object surfaces before coating.
- 4. Use thinners as quickly as possible once they are diluted.

## Expiration Date and Precautions on Storage

- 1. The expiration date following shipment from our company (before opening) is six months for the paint and one year for the thinner. Once opened, use the products as quickly as possible.
- 2. Avoid exposure to direct sunlight. Keep dry. Store in a cool, dark, and well-ventilated place at temperatures below 40 °C. Keep products locked (in hazardous materials storage).
- 3. Keep containers tightly sealed. Store in compliance with applicable regulations.
- 4. Keep out of reach of children.

### Precautions on Safety and Sanitation

#### >> Precautions on Use

- 1. Keep your face away from the container when opening it.
- 2. Handle with care. Damaged containers pose risk of contamination or fire. Keep containers upright during transportation and storage. Do not place on side or upside down.
- 3. Do not use near flames or sources of ignition.
- 4. Install local ventilation systems in places where the products are handled.
- 5. Take care to avoid direct contact between the product and skin during handling. Wear protective gloves, protective clothing, eye protection, and face protection
- 6. In case of spillage, scatter sand or other inert materials over the spill and collect.
- 7. Wash hands and rinse mouth and throat thoroughly after handling.
- 8. Do not eat, drink, or smoke when using this product.

#### >> First Aid Measures

- 1. If on skin or in hair, immediately remove all clothing contaminated with paint and wash with plenty of soap and water. Seek medical
- attention if you feel pain or notice any injuries.
- 2. If in eyes, rinse with plenty of water. Get immediate medical attention.
- 3. If inhaled and feeling unwell, remove the person to fresh air and place at rest. Get medical attention, if necessary.
- 4. If swallowed, get immediate medical attention.

#### >>> Firefighting Measures

1. In case of fire, use fire extinguishing agents or dry sand to extinguish.

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- 1. Empty the containers completely before disposal.
- 2. Dispose of contents/containers as industrial waste in accordance with local/regional/national regulations.
- 3. Dispose of coating materials, coating containers, and coating tools as industrial waste.

#### » Other

- 1. Refer to the product Safety Data Sheet (SDS) for more information.
- 2. The present product is designed for indoor applications. Refrain from use outdoors or in places exposed to direct sunlight for extended periods.
- Note : The contents of the present catalog are subject to change without notice.
- Note : The results of testing on various resistance characteristics are based our in-house evaluations. They do not constitute a guarantee of product quality or performance. Note : Unauthorized reproduction or use of the contents, texts, or images in the present catalog is strictly prohibited.

## Please contact us for more information.

TEL: +81-493-26-0781 FAX: +81-493-26-0786

Online contact form: www.edog.co.jp/inquiry



84-2 Shingo, Higashimatsuyama-shi, Saitama, 355-0071 www.edog.co.jp



# **Universal Primer**

# Edo Bosei EPR

- A universal primer with superior adhesion properties,
  - even usable for non-ferrous metals
  - that are conventionally difficult to adhere to.
  - The total concentration of toluene, xylene, MIBK,
    - and styrene has been kept below 0.1 %.
- This coating offers high environmental sustainability
  - and minimal environmental impact.







# **Features**

### Outstanding adhesion

The product exhibits excellent adhesion to various metal surfaces, including aluminum and stainless steel.

## **Excellent Corrosion Resistance and Beautiful Finish**

Special anti-corrosion additives help preserve the primed surface. A beautiful finish is achieved due to superior wettability, opacity, and minimal paint absorption when applying top coat.

### No Need for Specific Drying Temperature

Dried under a wide range of temperatures, from ambient to force-drying conditions (60°C-180°C)

# **Eco-friendly**

## Our commitment to the environment

- The total concentration of toluene, xylene, MIBK, and styrene is kept below 0.1 %.
- The use of chemical substances designated in the PRTR Act has been reduced by more than 99 % (compared to existing products, based on results of in-house testing, as of July 2020).
- Complies with all requirements of the Ordinance on Prevention of Dangers Due to Specified Chemical Substances (amended in June 2017).
- Entirely free of ten hazardous substances\* whose use is restricted by the RoHS Directive \* Cadmium, lead, mercury, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers, bis(2-ethylhexyl) phthalate, dibutyl phthalate, benzyl butyl phthalate, diisobutyl phthalate

# Intended Use

Use as an undercoat on metallic and non-metallic surfaces in general industrial applications.

# Color

# 301Gray / 802 Black / 901 White

For custom colors, please contact our sales representative.

# Volume

Edo Bosei EPR: 16 kg

# **Specialized thinners**

Thinner 2110 S (for summer) / SW (for spring and fall) / W (for winter): 16 L

# Instructions for Use

## 1. Pretreatment

Thoroughly degrease the surface before applying the epoxy resin.

## 2. Agitation

Agitate the coating material thoroughly before dilution.

## 3. Dilution and Mixing

The mixing ratio is main agent  $\Box$  hardener : thinner = 10 : 3 : 3–5. Use Thinner 2110. Measure precisely to adjust the mixing ratio by weight. Adjust viscosity in an Iwata NK-2 viscosity cup for 20-30 seconds (liquid temperature: 25 °C).

## 4. Application (spray coating)

	Air pressure	0.2–0.5 MPa	Nozzle diameter	1.0–1.5 mm	Standard co	at thickness	15–25 µm	Coverage	Approx. 135 g/m <sup>2</sup>
5. Drying and Curing									
	Room temperature (25 °C)		Dry to the tou	ich 15	min.				
			Hardened an	d cured 60	min.				
Forced curing (60 °C –120 °C)			5—	10 min.					

Note : When applying a topcoat, let the undercoat dry at ambient temperature for 15 minutes or longer before applying topcoat.

# **Coat Performance**

# **Results of Coat Performance Tests (Edo Bosei EPR 301 Gray)**

Test Items	Results	Test Conditions	Materials	
Adhesion	100/100	Cross-cut test with adhesive tape	SPCC-SD steel plate Zinc phosphate coated steel plate Bonderized steel plate Mill scale steel sheet (SS400) Aluminum (A1050P) Aluminum (A100P) Aluminum (A2017P) Aluminum (A5052P) Aluminum (A5083P) Aluminum (A6061P) Aluminum (A6063P) Stainless steel (SUS304) Stainless steel (SUS316) Stainless steel (SUS430)	
Pencil Hardness	HB	Film Hardness Tester using Mitsubishi UNI pencils (1 kg load)		
Bending resistance	No	Coating bending tester (φ4 mm × 180°/s)	SPCC-SD steel plate	
Impact resistance	abnormality	DuPont impact tester ( $\phi$ 1/2 inch × 500 g × 40 cm)		
Solvent resistance	No material	Lacquer thinner rubbing (with load of 500 g, number of rubbing cycles ≤15)		
	exposed	Xylol Rubbing (with load of 500 g, number of rubbing cycles ≤50)		
Saltwater resistance	No abnormality	Salt spray tester (5 % NaCl aqueous solution at 35 °C and 95 % relative humidity for 168 hours)		

Note : Curing condition for test sheets: left to cure at room temperature for 7 days after application

# Multilayer Adhesion Test Results(Edo Bosei EPR 301Gray + Topcoat)

Topcoat	Curing condition for Topcoat	Test Item	Result	Test Condition	Material	
2-Component Urethane Paint "Eco Bright ER"	After 30 minutes at 80℃	Adhesion	100 / 100	Cross-cut test with adhesive tape	SPCC-SD steel plate Zinc phosphate coated steel plate Bonderized steel plate	
2-Component Acrylic Urethane Paint "NEXUS NX"	7-Days Ambient Temperature Drying				Mill scale steel sheet (SS400) Aluminum (A1050P) Aluminum (A1100P) Aluminum (A2017P)	
Melamine Paint "Merada MR"	After 30 minutes at 120°C 1-Day Ambient Temperature Drying				Aluminum (A5052P) Aluminum (A5083P) Aluminum (A6061P) Aluminum (A6063P)	
Polyester Paint "Hipolyn TE"	After 30 minutes at 150°C 1-Day Ambient Temperature Drying				Stainless steel (SUS304) Stainless steel (SUS316) Stainless steel (SUS430)	

Note : Curing condition for test sheets: left to cure at room temperature for 1 day after application