

Specialty Anti-Corrosive Paint

EDO BOSEI EB

It is estimated that tens of thousands of steel are lost to corrosion every year in the world. Even stainless steel and other metals thought to be rust-free are found to corrode depending on the processing method used. Research and development of an anti-corrosive paint, or paint technology for that matter, is a critical responsibility for the paint maker. Our *Edo Bosei* anti-corrosive paint provides beauty but also prolongs product life for metal products along with excellent workability, anti-corrosive property, adhesion, and overcoatability. It contains no toxic pigments to ensure the health and safety of those working with and around the paint and can be used in various applications.

Edo Bosei EB Type (Air-Dry)

Product Summary

Edo Bosei EB Type is an air-dry paint that consists of modified, synthetic vinyl resin, low-toxic anti-corrosive pigments, color pigments, additives, and various solvents.

Functionality

- (1) Excellent adhesion to aluminum, zinc-coated steel, and other light alloy metals.
- (2) Excellent resistance to corrosion.
- (3) Great workability as it quickly dries at ambient temperatures (or forced drying).
- (4) Contains no toxic pigments (i.e. lead, chromium, etc.) to ensure the health and safety of those working with and around the paint.
- (5) Overcoatability with various kinds of finish coats (lacquer, phthalate resin, melamine resin, polyurethane resin, epoxy resin, acrylic resin for air-drying, and other thermosetting paints). (*Some acrylic lacquer may show weaker mutual adhesion. Do test painting before use.)
- (6) Sediments can be dispersed easily after long storage.
- (7) No lifting when overcoated with the same or a different paint.

Use and Application

Read the following instructions to ensure the best film performance:

- (1) Stir and shake well before use as some pigments may settle at the bottom (unstirred paint may have weaker anti-corrosive property, coloring effect, and adhesion).
- (2) Use *Thinner 2500* for thinning.
- (3) Thin up to 25-30% with *Thinner 2500* by weight to spraying viscosity of 15-25 seconds (Iwata cup at 20°C).
- (4) Paint with a brush, a spray gun, an airless spray gun, or electrostatic coating.
- (5) Coat with thin layers instead of one thick layer to have the best anti-corrosive performance.
- (6) Drying time: set-to-touch (5-10 minutes at 20°C), dry-hard (30-60 minutes at 20°C), and forced-dry (5-10 minutes at 60°C-150°C)

Intended Use

Anti-corrosion and excellent adhesion for steel, cast metal, die-cast metal, zinc-coated steel, aluminum, and polished stainless products.

Precautions

- (1) Mixing with other company's thinner may cause the pigments to separate from resin in a short time
- (2) It may blush in a high temperature, high humidity environment. (Add 5% retarder by weight to minimize blush.)
- (3) Do not mix with other paints.

Volume

Edo Bosei EB 16Kg

Thinner 2500 (S = for summer W = for winter) 16L

Colors

White, Black, Gray, Brown, Ocher

Film Performance

Test Item	Test Condition	Result
Adhesion	SPCC-SD steel plate (cross-cut test)	100/100
	Aluminum plate 1050P (cross-cut test)	100/100
	Zinc-coated, Bonderized steel plate (cross-cut test)	100/100
Erichsen Test	Erichsen testing machine: 5mm extrusion	Pass
Chip Resistance	Dupont impact tester: 500g, 1/2 inch, 50cm	Pass
Bend Test	3mm (diam.), 180°/1sec, Bend	Pass
Drawing Test	Drawing test equipment: 5mm (radius), 500g, 1/sec	Pass
Finish Coat Compatibility	Cross-cut test: lacquer, phthalate resin paint, and polyurethane resin paint	100/100
Water Resistance	Immersed in tap water at ambient temperature for 240 hours	OK
Acid Resistance	Immersed in 5% sulphuric acid solution for 48 hours	OK
Alkaline Resistance	Immersed in 10% sodium carbonate solution at 40°C for 24 hours	OK
Oil Resistance	Immersed in machine oil at ambient temperature for 200 hours	OK
Salt Spray Test	Salt spray tester: 5% NaCl solution at 35°C	
	film thickness: 20µm for 168 hours	Pass
	film thickness: 30µm (2-coat) for 240 hours	Pass
	over phthalate resin paint for 500 hours	OK
Weather Resistance	6 months exposure (from May to November)	OK

* Tests were conducted in accordance with JIS.K-5600.

* EB-Gray was used in all the tests.