# COARIZON

## The Solution to End Corrosion Everywhere

www.corrizon.jp

Corrosion is the bacteria

Corrizon is the antibiotics

Approx

276 billion \$/year in USA alone.

Data by

Data by

We do not cover the metal ...we treat it.

### 1 Effective

- It does not fight corrosion-rust but work with it.

  Capsulizing rust and active material penetrates into the metal and that system perfectly protects the metal.
- · Suitable for highly damaged metals as well as new ones.

### 2 Safe & Eco friendly

- · Waterborne totally green emulsion which is non flammable, non combustible & non poisonous.
- · Rigorous safety standards, making it suitable for indoor use. No protective gear required, reducing the cost of treatment.

### User-Friendly & Cost-Effective

- $\cdot \ \, \text{Single-component rust prevention agent which can be used without thinning, and can also be kept by storing in a sealed container.} \\$
- Fast drying coat, and can be over coated with almost any paint.
- Effective in extremely thin applications (25 to 30 microns), saving money and reducing the overall weight of coated metals.
- It does not need any strenuous expensive pre-cleaning. In many cases a high pressure water wash (400Bar or more) will suffice.

### Past Results





















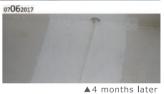
Car Carrier Ship: Goliath Leader Ship











Large Ship (China)









Large-Scale Longitudinal Pipeline



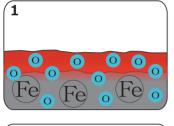


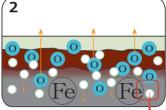


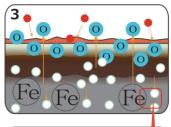


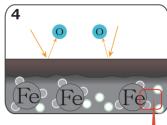
### An End to Corrosion Everywhere

#### Mechanism

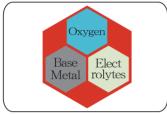








\*CAM: Corrizon Active Material



After applying Corrizon:



Corrosion requires 3 components to occur

Corrizon takes the oxygen out.

- 1, Rust is capsulized
- 2, CAM starts penetrating into the

Scavenging properties remove oxygen from the metal and Carbon goes in.

No Oxygen can come in the metal anymore and CAM continues penetrating

There will be no rust on the surface and inside the metal

### UL Environmental Standards GREENGUARD Certification

The GREENGUARD Certification Program is a global environmental sustainability standard issued by the American safety consulting company UL. It assures that products designed for use in indoor spaces meet strict chemical emissions limits. Corrizon was awarded the highest standard, GREENGUARD Gold Certification, with stricter certification criteria to ensure

that it is acceptable for use in environments such as schools and healthcare facilities.

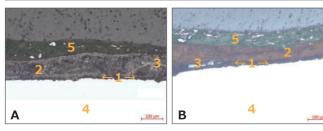
	Environment	TVOC	Formaldehyde	Total Aldehydes	CREL/TLV
GREEN GUARD	Office	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>
GREEN GUARD	Office	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>
GOLD	Classroom	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>



### IKA laboratories Itd. Salt Spray Test

In a side-by-side comparison conducted by analysis agency IKA Laboratories Ltd. metal panels with and without Corrizon coating were subjected to salt spray tests. Even in the 1000 hour test, Corrizon was found to prevent corrosion and slow the reduction of panel thickness.

	Corrizon coated panel	Normal metal panel
Presence of Rust on Metal Panel	Not Observed	Observed
Reduction of Metal Panel (mm/year)	0.00	3.1

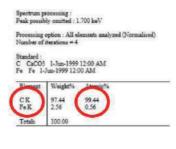


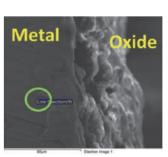
#### Cross Section of Corrizon-Treated Panel

A - Salt Water Spray Test After 300 Hours B - Salt Water Spray Test After 1000 Hours 1 - Corrizon Coat 2 - Corrosion Product 3 - Oxide Layer 4 - Steel Panel 5 - Paint

### California Polytechnic State University Permeability Test

Research into Corrizon's ability to permeate surface paint and reach the metal substrate was conducted by California Polytechnic State University. SEM and EDS analysis over 7 days following treatment confirmed the presence of carbon atoms in the paint layer and substrate.





Most permeation took place on Day 4 (45µ permeation). Complete Corrizon permeation was observed on Day 7 after coating.

> Even when applied on top of old paint, Corrizon showed effective protection against metal corrosion.



## COARIZON

### **Specifications**





Туре	1-component waterborne emulsion
Application	Various metals
Storage temperature	5~40℃
Application conditions	Temperature 5℃ or above, humidity 75% or less
Preparation conditions	Pressure wash pre-cleaning
Drying time	Touch-dry in 20 $\sim$ 40 minutes
Volume	20L / 120L / others available

### Quality



Standards Institution of Israel OHS Certification SI OHSAS 18001:2007



Standards Institution of Israel EMS Certification SI ISO 14001:2004



Standards Institution of Israel OMS Certification SI ISO 9001:2008



Management System Certification IQNet



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