



Your Corrosion Solution

PRODUCT INFORMATION

VAPPRO VCI VAPOUR CHIPS

Function: Vapour Corrosion Inhibitor (VCI)	Application: Electronics Enclosures	Form: Emitter
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DESCRIPTION



VAPPRO Vapour Chips are a unique flexible 0.5 inch plastic square infused with a formulation of volatile corrosion inhibitors.

Through volatilization the inhibitors counteract the corrosive effects of humidity, salt and pollutants on packaged iron, steel, aluminum, copper and brass surfaces.

VAPPRO Vapour Chips do not compromise the mechanical or electrical properties of electronic components.

FEATURES

- Cost effective
- Simple and safe to use
- Protects multi-metals against corrosion
- Available in multiple sizes to accommodate packaging needs
- Protected items are always ready for use
- Effectiveness of the vapour chip is not impaired by rough handling
- The VCI molecules will not interfere with any subsequent processing

Accelerated Corrosion Test

Coupons of the following metals were sealed in 0.006" gauge plain polyethylene bags together with a **VAPPRO Vapour Chip**.

Phosphor Bronze	(521)
Copper	(110-CR)
Aluminum	(6061-T6)
Brass	(260 soft)
Steel	(1010)

Coupons of these metals were also sealed in similar bags without **VAPPRO Vapour Chips**. All bags were placed in a water fog chamber (ASTM-B-117-73) at 100°F (38°C), 95% relative humidity for 8 weeks.

Results:

<u>Metal</u>	<u>Vapour Chip Protected Bag</u>	<u>Unprotected Bag</u>
Steel	No corrosion	Severe corrosion
Aluminum	Reduced attack, no pitting	Severe attack and pitting
Copper	Slight staining	Heavy attack
Brass	No tarnishing	Heavy discoloration and pitting
Phosphor	Slight staining	Heavy attack

VAPPRO Vapour Chips pass the testing protocol for the corrosion inhibiting abilities of VCI vapors as specified in the **Federal Test Method Standard 101B, Method 4031** and the exhaustion test procedure.

Shelf Life: 2 years (stored at 29.5°C or less)
 Life Span in Use: Minimum 1 year
 Handling: No special handling precautions required

APPLICATIONS

- Iron, steel, aluminum, copper and brass surfaces

DIRECTIONS FOR USE

Place a **VAPPRO Vapour Chip** in a plastic bag, container or box containing the items to be protected. **VAPPRO Vapour Chips** do not require an airtight enclosure to work. Plastic bags can be stapled closed and boxes can be closed as normal. The **VAPPRO Vapour Chip** immediately begins to emit VCI molecules which saturate the enclosed airspace of the package and condense on metal surface.

The VCI molecules combine with the water molecules and creates a protective coating on the metal surface. The metal surface becomes passivated. Replacement VCI molecules are provided from the saturated airspace and the **VAPPRO Vapour Chips**. As a result the metal surfaces are continuously protected from the effects of humidity, salt and acidic atmospheres.

PACKAGING

- 1000 pieces per bag (each piece 0.5" x 0.5")



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