



Your Corrosion Solution

# PRODUCT INFORMATION

## VAPPRO VCI VAPOUR CHIPS

**Function:**  
Vapour Corrosion Inhibitor (VCI)

**Application:**  
Electronics Enclosures

**Form:**  
Emitter

### DESCRIPTION



**VAPPRO Vapour Chips** are a unique flexible fused plastic of 0.5 inch squares, into which a formulation of volatile corrosion inhibitors has been incorporated. The inhibitors through volatilization counteract the corrosive effects of humidity, salt and pollutants on packaged iron, steel, aluminum, copper and brass surfaces without compromising any of their mechanical or electrical properties.

### FEATURES

- Cost effective
- Simple and safe to use
- Protects multi-metal against corrosion
- Available in multiple sizes to fit packaging needs
- Protected items are always ready for use
- Effectiveness not impaired by rough handling
- Surfaces can be soldered, painted or used as is
- 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:**

<b><u>Metal</u></b>	<b><u>Vapour Chip Protected Bag</u></b>	<b><u>Unprotected Bag</u></b>
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

**Note:** **VAPPRO Vapour Chips** pass the test for the corrosion inhibiting ability of VCI vapors as specified in Federal Test Method Standard 101B, Method 4031, including 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**

Installation simply requires placing a **VAPPRO Vapour Chip** in a plastic bag, container, box, etc containing the items to be protected. A **VAPPRO Vapour Chip** does not require an airtight enclosure to work. Plastic bags can be stapled closed or boxes may simply 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.

Any humidity present on these surfaces combine with VCI molecules such that the water molecules are rendered incapable of supporting corrosion. The metal surfaces are thus passivated. Replacement VCI molecules are provided from the saturated airspace and the **VAPPRO Vapour Chips**. In this way, the metal surfaces are continuously passivated from the effects of humidity, salt and acidic atmospheres, alone or in combination.

**PACKAGING**

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

North &amp; South America



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