

# VAPPRO®

VAPOUR CORROSION INHIBITOR

**Your Corrosion Solution**

## PRODUCT INFORMATION

### VAPPRO 826SK VCI SHRINK FILM MIL-PRF-22019D & MIL-STD 3010C

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

**Application:**  
Packaging

**Form:**  
Plastic Film



## DESCRIPTION

**VAPPRO 826SK VCI Shrink Film** is a significant breakthrough in protective packaging technology. It offers a new innovative concept in asset protection which integrates high impact resins with VCI corrosion protection.

**VAPPRO 826SK VCI Shrink Film** provides excellent corrosion protection for multi-metals. It protects industrial and offshore assets that have complex geometries. It also provides protection for void spaces and it does not alter the critical electronic or mechanical properties of the equipment.

**VAPPRO 826SK VCI Shrink Film** conforms to the **British Test Method BSI IEC 68-2-30:1980** and to the **MIL-STD 3010C**.

## CORROSION AND HOW VAPPRO VCI WORKS?

Corrosion starts when an electrolyte (water, oxygen, liquid or moisture) is present on the surface of a metal. When this happens, electrons flow in a loop through the electrolyte moving from the high-energy areas (anodes) on the metal to the low energy areas (cathodes). This flow of electrons causes oxidation on the metal surface which results in metal loss (corrosion).

VAPPRO Vapour Corrosion Inhibitors (VCI) stop this reaction on metals by polarizing an invisible molecular VCI barrier on the surface and in the recessed areas of the metal to protect it from the environment. As a result, it passivates the metal substrate from corrosion.

VAPPRO VCI properties will not alter or negatively affect any electronic components.

## FEATURES

- Heat shrink using a wide variety of propane or electrical shrink tools
- Provides VCI protection for indoor storage
- Film is transparent so the protected product is visible at all times, making it convenient to identify parts without compromising the packaging
- Multi-metals protection
- VCI Inhibitors will not affect any electrical or mechanical properties during packaging
- Protection for up to 3 years
- Replaces conventional rust preventatives
- Recyclable and non-toxic



## APPLICATIONS

- Tools and Spare Parts
- Offshore and Marine Equipment
- Industrial equipment
- Protection during shipping and storage

### Physical Properties

Film Thickness	6 mils (150 microns)
Film Type	Heat Shrinkable
Form	Sheeting VCI Shrink Film
Shelf Life	3 years stored in a cool dry environment
Roll Size	20' x 100' x 6mil
Appearance	Blue Transparent Film

Resin Properties	Typical Value	SI Unit	Imperial	Unit	Test Method
Melt Index (190°C/2.16 kg)	0.3	g/10 min.	0.3	g/10 min.	ASTM D1238
Density	924	Kg/m <sup>3</sup>	0.924	g/m <sup>3</sup>	ASTM D1505 ASTM D1928

### Thermal Properties

DSC Melt Temp	112	°C	234	°F	ASTM D3418
Vicat Softening Point	101	°C	214	°F	ASTM D1525

### Molded Plaque Properties

Tensile Strength at Break	20	MPa	2900	Psi	ASTM D638 Type IV (50mm/Proc A)
Elongation at Break	610	%	610	%	
Hardness – Shore A	97		97		ASTM D2240
Hardness Shore – D	52		52		
Flexural Modulus (1% Secant)	270	MPa	39,160	Psi	ASTM D790



Manufacturing Facility  
1450 Government Rd., West  
Kirkland Lake, ON  
P2N 2E9 Canada

Contact Information  
T: 1 (416) 479-9151  
F: 1 (888) 317-1993  
E: magna@vapro.com

Websites  
www.vapro.com  
www.vapro.ca