

ATION  
USA  
FILM  
INHIBITOR-PATENT



**HIGH PERFORMANCE VCI PACKAGING**

INHIBITOR  
ALL METALS  
USE

# Cor-Pak® VpCI-120 Skin Film



## PRODUCT DESCRIPTION

Cor-Pak® VpCI-120 Skin Film is a clear PE skin film that contains multimetal protection with Cortec® vapor corrosion inhibitors (VpCIs). The VpCIs release from the film and fill in the enclosed area. They then condense on all exposed metal surfaces forming a monomolecular protective layer, which bonds with the metal surface. VpCIs protect metals from corrosion due to moisture, salts, acids and other industrial air pollutants. Parts protected with Cor-Pak® VpCI-120 are ready for immediate use. No cleaning or degreasing of parts is necessary. VpCIs do not interfere with further processing of components. The part can be welded, soldered or painted without removing the VpCI layer.

Cor-Pak® VpCI-120 is clear, allowing for easy inspection of packaged items. It is also an excellent choice for applications where conventional skin film is being used for metal packaging. Cor-Pak® VpCI-120 Skin Film can be used with standard skin packaging equipment. VpCI-120 will allow protected parts to be stored corrosion-free for up to two years.

## ADVANTAGES

- Immobilizes product's protection for handling and shipping
- Overall cost of skin packaging is much less, than dunnage materials used in industrial packaging and requires much less storage space.
- Compare to blister package, total skin-packaging cost is generally less, if the product and blister are large in relation to the card.
- Improved heat-seal and hot tack strength
- Low seal initiation temperature
- Provides wider operating windows
- Faster line speeds
- Reduces product deterioration
- Superior overall toughness
- Improved product protection
- Improved package appearance

## METALS PROTECTED

- Carbon Steel
- Stainless Steel
- Iron
- Brass
- Copper
- Solder
- Aluminum
- Silver
- Nickel

For metals not specifically listed above, please contact Cortec for Information regarding this protection.

## APPLICATION

Use VpCI-120 for skin packaging (visual carded packaging). The part being packaged becomes the mold over which the heated plastic film or "skin" is drawn by vacuum and heat-sealed to a paperboard card, providing excellent visibility. Film is typically used for industrial packaging and for point of purchase packaging and other items to be displayed. The film is excellent for packaging hardware, parts to be stored extensively, applications where multiple parts need to be packaged together, door locks, antennae, hand tools, kitchen implements, plumbing accessories, screwdrivers, fasteners, drill bits, sawblades and more.



**Note:** Depending on application and sealing technique used, the film may need surface treatment.

**CORROSION TESTING**

- German VIA Test (German Military Std. TL – 8135 – 002): Pass
- Cortec Razor Blade Test: Pass
- Cortec SO<sub>2</sub> Cycling Corrosion Test: Pass
- Cortec F – 12 Cycling Corrosion Test: Pass

The film conforms to military specifications, MIL-PRF-22019 D and MIL-B -22020 D for barrier, flexible, sealable, volatile corrosion inhibitor treated materials.

**IMPORTANT CONSIDERATIONS FOR SKIN PACKAGING SYSTEMS**

The film must be compatible with the heat-seal coating on the paperboard card to insure a fiber-tearing bond or heat seal. Paperboard must be selected according to caliper, stiffness and other strength characteristics necessary to support the product. High porosity paperboard should be used to allow proper dropdown of the film and good contact with the card.

For additional VpCl corrosion protection when an adhesive or cohesive is to be used with film, Cortec’s M-5120 is recommended to be added to the adhesive/cohesive in the amount of 2 -5% by weight. M-5120 is a multimetal VpCl additive for adhesive/cohesive systems.

**PACKAGING AND STORAGE**

Cor-Pak® Skin Film is available in single wound sheeting form from 3 mil (75 microns) to 10 mil (250 microns), with a size range of 24” (61 cm) up to 33” (83.8 cm) maximum. Film should be stored indoors at ambient conditions, sealed in

**FOR INDUSTRIAL USE ONLY**

**KEEP OUT OF REACH OF CHILDREN**

**NOT FOR INTERNAL CONSUMPTION**

**CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION**

original packaging. Under these conditions, shelf life is up to 24 months.

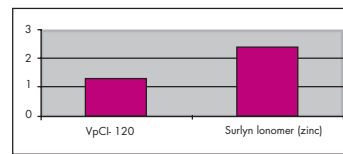
**Note:** The data contained herein is furnished for information only. We cannot assume responsibility for the results obtained by others over whose methods we have no control. One or more United States or foreign patents or patent applications may cover this product.

**TYPICAL PROPERTIES**

**TABLE 1: TOUGHNESS AND CLARITY**

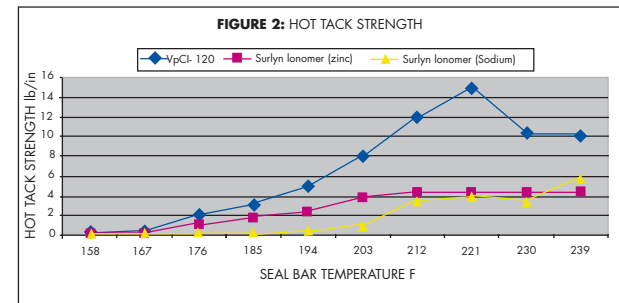
Polymer	Dart Impact (g)	Puncture Resistance (ft-lb)	Elemendorf Tear (g. MD)	Haze (%)
VpCl-120 Skin Film	>830	348 (29)	355	1.1
Surlyn Ionomer (zinc)	434	104 (8.7)	190	2.9
Surlyn Ionomer (sodium)	750	140 (11.7)	30	3.2

**FIGURE 1: ODOR PERFORMANCE**



1. Odor panel evaluated 2-mil (51 micron) blown film for odor intensity

**FIGURE 2: HOT TACK STRENGTH**



**LIMITED WARRANTY**

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