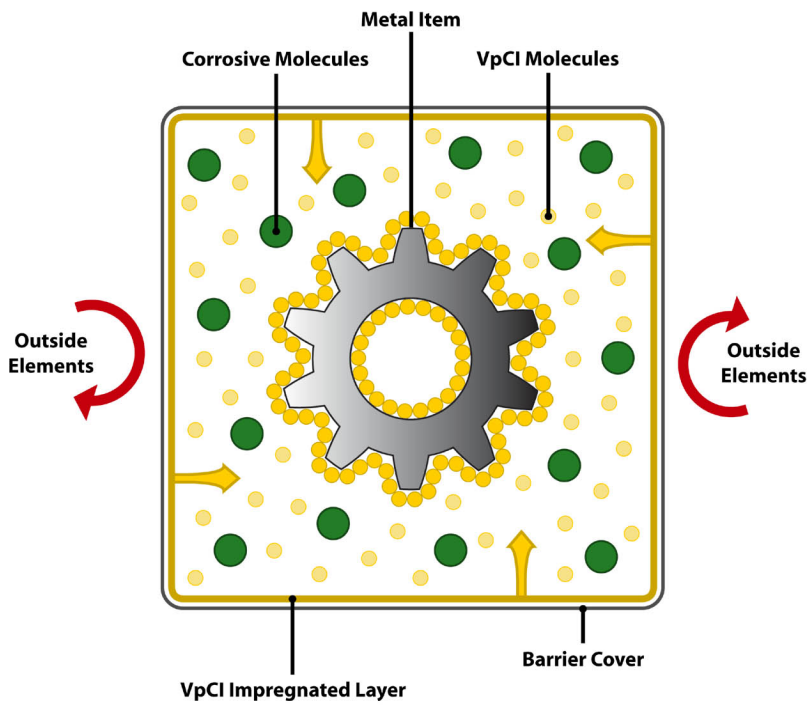
More About VpCI Chemistry

WWW.ZCORRPRODUCTS.COM

VpCI stands for vapor-phase corrosion inhibitor, and is a type of volatile corrosion inhibitor whose molecules migrate out of a source material and vaporize into the surrounding environment. When this vaporization occurs inside a sealed package, it creates a highly concentrated atmosphere of VpCI molecules. These molecules are highly attracted to metal surfaces, and navigate around larger molecules of corrosive elements, such as salts, oxygen, and water, to settle on them. A chemical reaction occurs between the molecules and the metal, leaving the metal coated with a one molecule thick protective barrier that prevents corrosive elements from contacting the metal surface, thus preventing corrosion.



When an item is then removed from a ZCORR Bag, the surface coating harmlessly dissipates into the ambient atmosphere, with no cleaning or reconditioning necessary.

All ZCORR Bags employ a barrier layer to ensure that the protective VpCI molecules in the sealant layer migrate in one direction, into the package. Additionally, it blocks other corrosion causing elements, such as moisture, oxygen, and sulfur dioxide, from passing through the material and into the package itself. This dual protection process creates a long-term product preservation system without the hassles associated with more traditional barrier packaging, such as nitrogen purging, gas flushing, greasing, or other complicated chemical application and cleaning procedures.

A helpful analogy to consider would be: Upon entering a kitchen, you notice the smell of a freshly baking cake. By keeping the doors and windows shut, the smell will remain in the kitchen for an extended period of time, while keeping the cooler outside air out. ZCORR Bags are like a tightly sealed kitchen, keeping the protective VpCI molecules inside the package, and any unwanted, outside elements out.