



## NEWS ALERT!

VBCI Series - A class of environmentally friendly corrosion inhibitors for a cleaner, greener, better tomorrow.

25 Oct 2019

Vappro VBCI is a new class of VCIs, it has been developed in harmony with the concern for the environment. While these chemicals offer excellent protection to metal surfaces, they have a very low impact on the environment and promote the use of sustainable resources.

Many traditional VCI manufacturers developed a wide range anti-corrosion product to combat said problem, many times at the expense of damaging the environment and the safety of the users by using non-biodegradable carriers and exhaustible materials such plastics and paper.





Governments and industry around the world are realizing that environmentally friendly chemicals and its' carriers are important to the general well-being of users and it is important to replace the toxic chemicals to humans and environment with non-or less toxic chemicals.

Environmentally friendly corrosion inhibitors and its carriers prevent or reduce the use of chemicals that are hazardous to the environment or human beings.

Plastics and Paper are common materials used in packaging both for Industrial and consumer markets. About 300 million tons of plastic is produced globally each year. Only about 10 percent of that is recycled. Of the plastic that is simply trashed, an estimated seven million tons ends up in the sea each year.





## **NEWS ALERT!**

VBCI Series - A class of environmentally friendly corrosion inhibitors for a cleaner, greener, better tomorrow.

25 Oct 2019

## **HOW LONG DOES IT TAKE TO DECOMPOSE**

Plastic waste is one of many types of wastes that take too long to decompose. Normally, plastic items can take up to 1000 years to decompose in landfills. But plastic bags we use in our everyday life take 10-1000 years to decompose, while plastic bottles can take 450 years or more.

Petroleum-based VCI plastics film such as HDPE and LDPE don't decompose the same way organic material does. This kind of decomposition requires sunlight, not bacteria. When UV rays strike plastic, they break the bonds holding the long molecular chain together. If exposed to ultra violet light, these bags have been estimated to break down in as little as 500 years with a conservative average time of 1000 years. If there is no exposure to a light source, say at the bottom of a landfill, the plastic may remain intact indefinitely.

World consumption of paper has grown 400 percent in the last 40 years. Now nearly 4 billion trees or 35 percent of the total trees cut around the world are used in paper industries on every continent. That equates to about 2.47 million trees cut down every day.

· · · · · · · · · · · · · · · · · · ·	and the second second	
Paper Towel	2-4	Weeks
Banana Peel	3-4	Weeks
Paper Bag	1	Month
Newspaper	1.5	Month
Apple Core	2	Months
Cardboard	2	Months
Cotton Glove	3	Months
Orange Peels	6	Months
Plywood	1-3	Years
Wool Stock	1-5	Years
Milk Cartons	5	Years
Cigarette Butts	10-12	Years
Leather Shoes	25-40	Years
Tinned Steel Can	50	Years
Foamed Plastic Cups	50	Years
Rubber-Boot Sole	50-80	Years
Plastic Containers	50-80	Years
Aluminium Can	200-500	Years
Plastic Bottles	450	Years
Disposable Diapers	550	Years
Monofilament Fishing Line	600	Years
Plastic Bags	200-1000	Years



Globally, many Volatile Corrosion Inhibitors (VCIs) manufacturers are using exhaustible materials such as Kraft Paper, Mineral Based Oils, Hydrocarbon Solvents and non-biodegradable polyethylene resins LDPE and LLDPE, HDPE Polyethylene film as carriers for their products.

In support of the Paris Climatic Treaty, environmental and resources sustainability, Magna International together with Autonomous University of Baja California (UABC) search for ways and means to use environmentally friendly sustainable carriers such as Mineral Stone Paper, water-soluble PVA (Poly Vinyl Alcohol) [-CH<sub>2</sub>CHOH-]<sub>n</sub> and organic corrosion inhibitors for its range of VBCI (Vapor Bio Corrosion Inhibitor) Products.





The use of biodegradable environmentally friendly organic corrosion inhibitors and its sustainable resources are one of the best options of protecting metals and its alloys against corrosion as they do not contain heavy metals and essentially non-hazardous.

In addition to being environmentally friendly and ecologically acceptable, Vappro VBCI products are both organic and plant-based products are inexpensive, readily available and renewable.

Vappro VBCI is a new class of VCIs, it has been developed in harmony with the concern for the environment. While these chemicals offer excellent protection to metal surfaces, they have a very low impact on the environment and promote the use of sustainable resources.

## VBCI SOLUPLAST



SOLUPLAST Water-Soluble VBCI Plastic Film in seawater or freshwater