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# Introduction of Vappro VBCI Master-batch Bioplastic Resins











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

# Introduction of Vappro VBCI Master-batch Bioplastic Resins



Vappro VBCI Master-batch Bioplastic Resins are fast gaining traction in driving the evolution of Masterbatch resins and VCI packaging films. The major advantage that bio-based plastic products have over their conventional forms is that they use annually-regenerating biomass, which conserves fossil fuels. This also provides the unique potential of carbon neutrality. Certain types of bioplastics are also biodegradable, offering an additional means of recovery at the end of a product's life.

Today, there is a Vappro VBCI bioplastic alternative available for almost every conventional plastic material and corresponding application. While exhibiting the same properties as conventional plastics, Vappro VBCI Master-batch Bioplastic Resins offer additional advantages such as reduced carbon footprint or additional waste management options such as composting.

Bioplastics are an essential part of the bio-economy and a fast-growing, innovative industry with potential to decouple economic growth from resource depletion and environmental impact. Vappro VBCI Master-batch Bioplastic Resins comprise a diverse family of bioplastics with different properties and applications. They are mostly bio-based, biodegradable, or both. There are two main groups:

**Vappro VBCI 1200** Plastics that are both bio-based and biodegradable, such as PLA and PHA or PBS;



**Vappro VBCI 1300** Plastics that are based on fossil resources and are biodegradable, such as PBAT.

$$\begin{array}{c} O \\ \square \\ C \end{array} \\ \hline C \end{array} \\ \hline C - O - (CH_2)_4 - O \right]_{m} \left[ \begin{array}{c} O \\ C \\ C \end{array} \\ \hline C - (CH_2)_4 - C - O - (CH_2)_4 - O \right]_{n} \end{array}$$

$$\begin{array}{c} O \\ \square \\ C \\ \hline C \\ \hline C \end{array} \\ \hline PRAT$$

While these bioplastics are technically equivalent to their fossil counterparts, they help to reduce a product's carbon footprint and can be mechanically recycled in existing recycling streams, presenting a greener and more sustainable option.

Vappro VBCI Bioplastic Resins will be available for purchase in August 2017. Please contact Magna International Pte Ltd at info@vapprovci.com for more information.







## **Vappro VBCI Series**

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





**VBCI Product Introduction** 

## Vappro VBCI 200 Water Based Rust Preventive VOC Free Biodegradable Water-based Rust Preventive Coating

#### Description

Vappro VBCI 200 is a water soluble VBCI corrosion inhibitor and a biodegradable rust preventative coating, developed for protection of machined components and equipment during shipment or temporary storage. It leaves behind a colorless transparent coating after water evaporation.

Unlike traditional rust preventative oils, Vappro VBCI 200 does not leave behind a visible coating on the surface protected and is virtually undetectable. This unique feature allows better ease of inspection of the protected parts and enhances the aesthetic of the protected equipment or machined parts.

#### **Features & Benefits**

- Biodegradable
- VOC Free
- Provides excellent multi-metal protection.
- Nitrite-Free
- Non-hazardous & Non-Toxic
- Can be applied on painted surfaces
- Provides lubrication to moving parts
- Transparent coating
- Leaves behind a virtually undetectable coating
- Contains no chlorinated compound
- Provides film-forming and VCI protection
- Moisture displacement properties
- Replaces hazardous mineral oils and flammable solvents



#### **Applications And Area Of Use**

- Provides protection of all machined parts against oxidation and corrosion.
- Temporary coating for storage and shipment of equipment.
- Provides operational and moving parts against corrosion in marine and harsh environmental conditions.
- Specially developed to provide ease of inspection for all protected, storage and mothballed equipment.

**Enviromental Responsibility** 

### **RoHS COMPLIANT**

We at Magna are well aware of the importance of developing products which are both the finest performers in their respective fields and yet, at the same time, environmentally-friendly. The European Union (EU) Directive on Restriction of Hazardous Substances (RoHS) restricts the use of harmful substances which may be detrimental to the environment and consumers. Magna has ensured that our products meet the Directive.

Vappro products have been submitted for testing and certified by Bureau Veritas, an established organization specialized in QHSE (quality, health, safety and environment) management and certification. Magna is pleased to inform all our current and potential customers that our products are free of any of the restricted substances stated in the Directive (2002/95/EC), as according to the results.







#### Magna

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