



**NATO STOCK NUMBER: 6850-32-078-2670**

## Solving Corrosion Problems with the Environment in Mind **Vapro 823 Mineral Stone Paper Vapour Corrosion Inhibitor (VCI) Pouch**

*The greener alternative for anti-corrosion packaging*

**Vapro 823 Mineral Stone Vapour  
Corrosion Inhibitor (VCI) Pouch** Eliminates  
the Use of Conventional Anti-Corrosion  
Hazardous Oil or Solvent Coatings for All  
Metal Substrates Against Corrosion  
During Storage or Shipping



### **RoHS Compliance**

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 Group recognises the importance of product performance and environment sustainability. Our products undergo rigorous testing for QHSE (Quality Health Safety and Environment) management, and are certified by Bureau Veritas as RoHS compliant. Magna is pleased to assure our current and potential customers that our products are free of any of the restricted substances stated in the Directive (2002/95/EC).



This page is intentionally left blank

## Introduction

Vapro 823 Mineral Stone VCI Pouch is made from Global Patented No. WO2017023201A1.VCI Mineral Stone Paper and Proprietary Vapor Corrosion Inhibitors.

Vapro 823 VCI Mineral Stone Paper Pouch Is a revolutionary environmentally friendly concept for protection of both ferrous and non-ferrous metals against corrosion during storage or shipment. It can be used in conjunction with any packaging materials such as paper carton, kraft paper, wooden crates or boxes, plastic film etc.

It replaces the conventional rust coatings and oils that pollute the environment through the emission of Volatile Organic Compound (VOC). Vapro 823 VCI Pouch is made from Vapro 830 VCI Mineral Stone Paper, a global packaging award winner for Eco-Packaging.

Vapro 823 breathable pouches containing proprietary patented Vapour Corrosion Inhibitor are made from global patented VCI Minerals Stone Paper. It conforms to US Military Specifications MIL-I-22110C and is listed on the NATO MCRL (Master Cross Reference List) with assigned NATO Stock Number: 6850-32-078-2670 issued by NATO Maintenance Supply Agency (NAMSA).

## Features & Benefits

- ✓ Environmentally friendly
- ✓ Non-pulp based pouch
- ✓ Eliminates the use of trees
- ✓ Multi-metal protection
- ✓ UV-resistant
- ✓ Excellent water-resistant
- ✓ Reusable and recyclable
- ✓ Essentially non-toxic
- ✓ Does not contain nitrites, phosphates, silicones, chromates, or other heavy metals
- ✓ Pouch material used conforms to military specifications MIL-P-3420E
- ✓ Protective layer does not need to be removed prior to further surface finishing or coating applications
- ✓ Protects dry or oiled metals during storage, transit, and overseas shipment
- ✓ Combines corrosion protection and packaging into one Viable alternative to conventional pulp-based VCI paper
- ✓ Allows normal usage of protected metallic parts including painting and welding



The 3Rs  
Environmental  
Concept

**3R**educes  
eusable  
recyclable

## Vapro VBCI 830 Mineral Stone Paper Awards



**Winner of WorldStar  
Packaging Award 2017**  
for Packaging Excellence  
World Packaging  
Organisation



AsiaStar 2016



**Winner of AsiaStar  
Award 2016**  
Asia Packaging  
Federation (APF)  
Eco-Packaging



**Winner of the  
Singapore Star  
Packaging Award** in  
the Environmental  
Sustainable Category



**Winner of the Promising  
SME 500 2016 Top 10  
Special Achievement  
Award-Outstanding  
Eco-Green Award**



## Applications

- ✓ To protect against corrosion of parts, components and completed assemblies during shipping and storage.
- ✓ Tools, spare parts and components.
- ✓ Motors and mechanical controls.
- ✓ Electrical equipment and controls.
- ✓ Long tubular products and pipe.

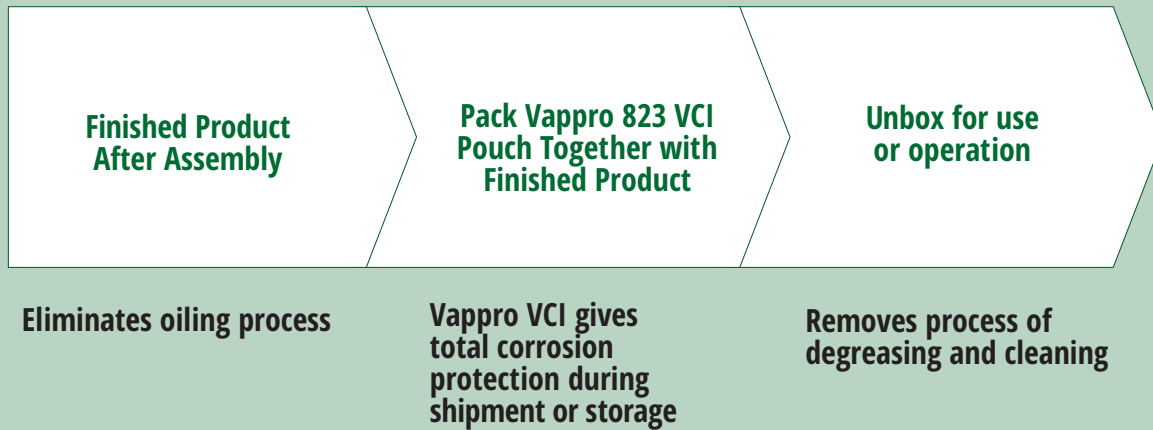


**PROTECT WITH  
VAPPRO VCI  
ADVANCED VCI  
TECHNOLOGY**



military | industrial | marine | oil & gas | energy

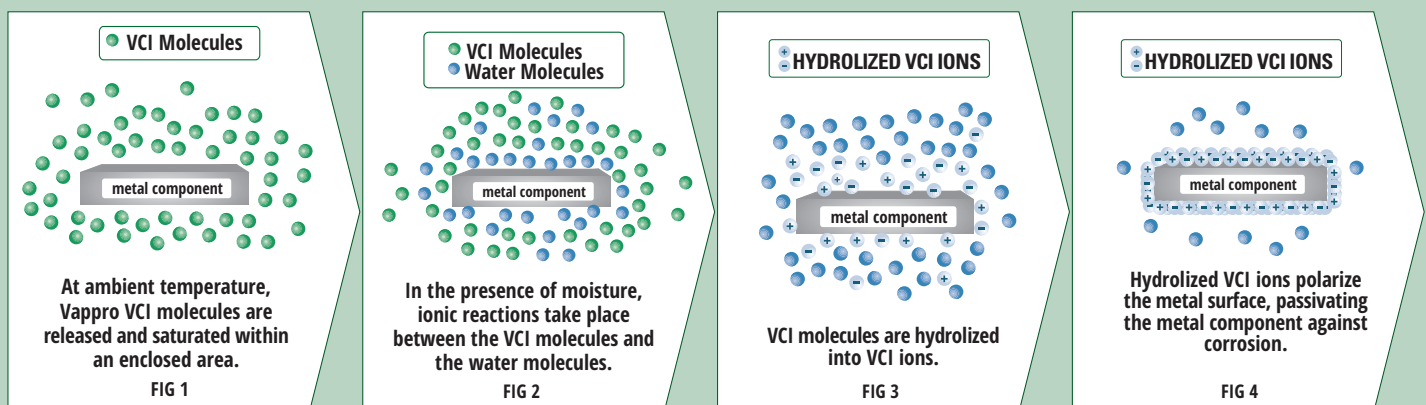
## Cost-effective Corrosion Control with VAPPRO 823 Mineral Stone Paper VCI Pouch



## Multi-Metals Protection Capability

- |  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> Copper           | <input checked="" type="checkbox"/> Brass                | <input checked="" type="checkbox"/> Carbon Steel     |
| <input checked="" type="checkbox"/> Cast Iron        | <input checked="" type="checkbox"/> Cadmium              | <input checked="" type="checkbox"/> Galvanized Steel |
| <input checked="" type="checkbox"/> Aluminium Alloys | <input checked="" type="checkbox"/> Silver               | <input checked="" type="checkbox"/> Aluminized Steel |
| <input checked="" type="checkbox"/> Zinc             | <input checked="" type="checkbox"/> Copper-Nickel Alloys |  |
| <input checked="" type="checkbox"/> Magnesium Alloys | <input checked="" type="checkbox"/> Stainless Steel      |  |

## How VAPPRO 823 Mineral Stone Paper VCI Pouch Protects



Vapro VCI protects all recessed areas and cavities and works on all metal surfaces in an enclosed atmosphere. In an enclosure, VCI emits molecules to a point of saturation within 12-24 hours. In the presence of moisture, these VCI molecules hydrolyze to form VCI ions. The Vapro VCI ions are attracted to metal surfaces to form a thin mono-molecular protective layer over the metal surface. These ions passivate the metal and cause it to be inert to corrosion. The vapour covers all surfaces including crevices, cavities and all inaccessible areas sealing them to provide total protection.





## COMPANY INFORMATION

# Magna group

Magna Canada  
Regional Office

Magna International  
Head Office

Magna Australia  
Regional Office

### INTRODUCTION

Magna Group of Companies consists of Magna International Pte Ltd, Magna Far East Pte Ltd, Magna Canada Inc, Magna Australia Pty Ltd and Magna Energy Pte Ltd. The Magna Group is one of the world's foremost leaders in the specialized fields of corrosion-preventive technology, specialty lubricants and cleaning surfactants. Since its incorporation in 1990, first starting out as a manufacturer and distributor of cleaning and maintenance chemicals, the Magna Group has now carved itself a niche in the area of specialty surfactants, lubricants and additives. The products of the Magna Group are marketed under the brands Vapro, Corpro and Lupromax.

Represented by distributors in more than thirty countries in the NAFTA Region, Asia Pacific and Europe, the Magna Group is continually reinventing itself to accommodate the ever-present changes in the chemical industry. We at Magna make use of the powers of innovation, science and technology to satisfy customers' requirements.

Magna has established itself as a brand of excellence. Over 180 products are listed in the NATO Master Cross Reference List (MCRL), with individually assigned NATO Stock Numbers for easy reference.

Magna's focus on technical expertise, operational excellence, and its range of practical yet environmentally-friendly products has netted us the certification of the ISO 9001:2000. Magna Group is committed to achieve our mission of improving the lives of consumers, satisfying the needs of customers, and continuing our contribution to the chemical



With company headquarters in Singapore, the Magna Group's in-house Research & Developments team has made milestone achievements in corrosion-preventive technology, water treatment chemicals, lubricants and specialty surfactants.

### MAGNA INTERNATIONAL PTE LTD

Magna International Pte Ltd, an innovative chemical company that manufactures specialty chemical products, was incorporated in September 1992.

Our specialty chemical products are represented in 25 countries in the Asia Pacific Region and Europe.

### MAGNA (FE) CHEMICAL PTE LTD

Magna (FE) Chemical Pte Ltd is a fast growing company that manufactures environment friendly, biodegradable products for a cleaner, greener, better tomorrow. It was incorporated in 8th August 1990 specializing in the blending and distribution of cleaning and maintenance chemicals.

Magna (FE) Chemical Pte Ltd is a registered contractor with the Ministry of Finance Expenditure and Procurement Policies Unit (EPPU), and Construction Industrial Development Board (CIDB).

Magna (FE) Chemical supplies chemical products to Government Departments, Statutory Boards and various Government-Linked Companies.



This page is intentionally left blank



# www.vapprovci.com

*Environmentally Friendly VCI Solutions*



## Magna International Pte Ltd

10H, Enterprise Road, Singapore 629834.

**Tel** (65) 6788-1228

**Fax** (65) 6785-1497

**Email** info@vapprovci.com

**Web** www.vapprovci.com



**ECO FRIENDLY  
SUSTAINABLE  
BIODEGRADABLE**

