

# Zerust® ICT® Vapor Capsules

TECHNOLOGY THAT PROTECTS METAL FROM CORROSION

## PRODUCT INFORMATION

### THE PROBLEM

Offshore oil platforms, refineries, retail gas stations and other such facilities typically operate in a humid environment that contains relatively high concentrations of contaminants that cause high, unpredictable, aggressive corrosion. Corrosion of automation systems, electrical control boxes, retail fuel pump meters, connectors, contacts, relays, switches and printed circuit boards, causes unscheduled maintenance and reliability issues at these facilities. Few enclosures can be economically protected by air conditioning or a fully hermetic vacuum seal. Even explosion-proof housings aspirate ambient air through the long thread channel of the cast housings and by diffusion through seals and gaskets. Traditional protection methods such as painting, greases, electrical heaters inside control boxes to prevent condensation, etc. are not effective.

Problems caused by corrosion include resistivity changes and intermittent contact failures in critical alarm and control functions, added local heating and power loss in critical components, solderability issues for circuit boards, changing the calibration of analog meters and, ultimately the integrity of cabinets are compromised.

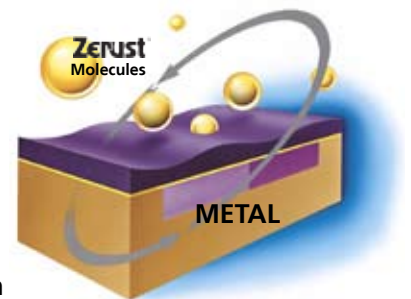
### THE SOLUTION

For over 30 years, Northern Technologies International Corporation (NTIC) has used proprietary Vapor Corrosion Inhibitors (VCIs) to protect metal substrates across numerous industries. The specific solution recommended for electronics and electrical control boxes is NTIC's line of Zerust®ICT® Vapor Capsules. These capsules are available in various sizes to suit multiple applications.

#### Protected by Zerust® ICT® Vapor Capsules



#### No Protection



### NTIC'S OIL & GAS CLIENTS

- Petrobras, Brazil
- Emirates Petroleum Products Company (EPPCO), UAE
- Conoco-Philips, USA
- Shell, Malaysia
- Shell, Philippines
- Exxon-Mobil, USA
- Baker-Hughes, USA
- Halliburton, USA

### BENEFITS OF ZERUST®

- Reduce maintenance costs
- Reduce corrosion incidences
- Reduce repair and inspection time during shutdowns
- Increase safety due to prevention of equipment failures
- Comes with Zerust® global on-site support

Zerust®ICT® Vapor Capsules perform exceptionally well in the high humidity, high temperature environments typical of oil rig operations.



# ORDERING INFORMATION

## ■ AVAILABILITY

Sold by the case. Call for pricing and quantity information.

## ■ PROTECTION TYPE

Available in multimetal corrosion protection capability.

## ■ PROTECTION VOLUME/RADIUS

Please refer to the Sizes & Specifications chart on right.

## ■ PROTECTION LIFE

Will protect metals for 1 to 2 years (depending on the product model) if positioned properly within an enclosure. Limit air exchange within the enclosure to maximize the protection life.

## ■ SHELF LIFE

Shelf life of 2 years if stored out of direct sunlight, at 85° F or less and in original packaging.

## ■ IMPORTANT INFORMATION

Do not install where capsule will be submerged in water.

Avoid repeated use at temperatures above 180° F.

Zerust®ICT® Vapor Capsules may yellow paper over time; do not use in the proximity of valuable documents.

## QUESTIONS?

Please contact a Customer Service Representative at: +1 (763) 225-6600 or email [sales@zerust.com](mailto:sales@zerust.com).

# Zerust® EXCOR®

A product of:  
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## SIZES & SPECIFICATIONS

Product Name	Volume of Protection	Radius of Protection	Duration of Protection	Adhesive Backing
<b>VC1-1 (S)</b>	4.2 ft <sup>3</sup> (0.12 m <sup>3</sup> )	1 ft (0.3 m)	1 year	Yes
<b>VC1-1</b>	4.2 ft <sup>3</sup> (0.12 m <sup>3</sup> )	1 ft (0.3 m)	1 year	Yes
<b>VC2-1</b>	33.5 ft <sup>3</sup> (0.95 m <sup>3</sup> )	2 ft (0.6 m)	1 year	Yes
<b>VC2-2</b>	33.5 ft <sup>3</sup> (0.95 m <sup>3</sup> )	2 ft (0.6 m)	2 years	Yes
<b>VC6-1</b>	905 ft <sup>3</sup> (25.63 m <sup>3</sup> )	6 ft (1.8 m)	1 year	No
<b>VC6-2</b>	905 ft <sup>3</sup> (25.63 m <sup>3</sup> )	6 ft (1.8 m)	2 years	No

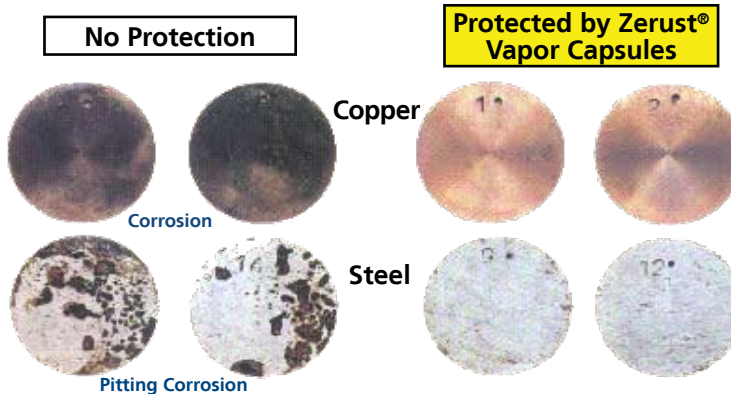
## EFFECTIVENESS

Multimetal Corrosion Protection Performance Test

Test Period: 29 Days

Corrosive Indoor and Outdoor Environments

Temperature: Room Temperature (10° to 20°C), heated to 40°C for 44.5 hrs and 50°C for 62 hrs



## INSTALLATION

Zerust®ICT® Vapor Capsules are easily installed in a matter of seconds without tools or specialized labor. Simply peel the cover tape from the adhesive backing and affix to most surfaces.

