

Editorial Contact:
Cortec® Advertising Agency

Jeni Duddeck
(651) 429-1100 Ext. 1114

jduddeck@cortecvci.com

Company Contact:
Cortec® Corporation

Julie Holmquist
(651) 429-1100 Ext. 1194

jholmquist@cortecvci.com

Technical Contact:
Cortec® Corporation

Rick Shannon
(651) 429-1100 Ext. 1146

rshannon@cortecvci.com



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PRESS RELEASE



Cortec® R&D Leads the Way in a New Approach to CUI!

For all the research that has been done on CUI, the cost of CUI damage to industries with insulated piping and equipment continues to be disproportionately high. Oil and gas, petrochemical, refining, and maritime industries are especially hard hit, yet the very nature of the problem makes it easy to miss and difficult to treat. Cortec® is leading the way to change all that by its recent development of [CorroLogic® CUI](#)



[Inhibitor Injection](#), a 100% Vapor phase Corrosion Inhibitor that can be applied into existing insulation with minimal disruption. Here is a look at how Cortec® achieved its latest discovery in the treatment of CUI.



Guiding Principles for Cortec® R&D

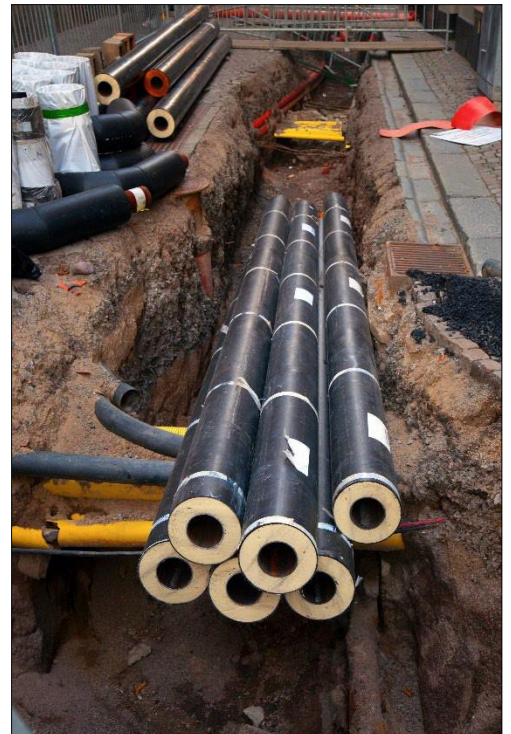
Cortec's quest for effective corrosion solutions has been informed by its desire to find answers that are user friendly and environmentally responsible wherever possible. The development of CorroLogic® CUI Inhibitor Injection embodies this vision. First, CorroLogic® CUI Inhibitor Injection is extremely practical compared with other forms of CUI protection. Most CUI

treatments involve coatings that can only be applied when insulation is not covering the metal surface. This factor limits treatment to new piping and equipment unless the facility is willing to invest the time and money required to remove and reapply insulation. Cortec® had previously solved this problem with a CUI corrosion inhibitor that could be injected into insulation on pipes and equipment that did not reach temperatures of more than 338 °F (170 °C). Because this method of CUI protection translates into extraordinary savings in terms of labor and production, Cortec® developed a second injectable CUI inhibitor that can be used at even higher temperatures. To make matters better, the final product is made of high biobased content and readily biodegradable raw material (according to OECD 301), meeting the sustainability side of Cortec's R&D vision.

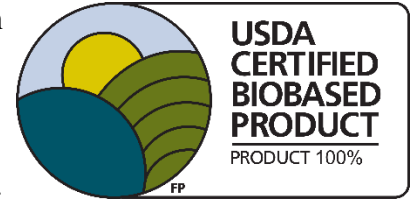
R&D Process

In order to develop CorroLogic® CUI Inhibitor Injection, Cortec® R&D screened many high temp Vapor phase Corrosion Inhibitors and studied their viability for CUI. Cortec® settled on a chemistry that was stable up to 662 °F (350 °C) with a flash point of 310 °F (154 °C). In order to confirm that it was suitable for the target application, Cortec® set out to evaluate the following properties:

- Vapor diffusion
- Hydrophobicity
- Corrosion protection
- Application time and distance



The product showed effective vapor diffusion and corrosion protection even when placed multiple feet away from the metal test panel. Hydrophobicity was good and increased with exposure time—so much so that, at one point, the chemist studying the product had to place round metal washers on the treated panel to keep saltwater droplets from rolling off. Once basic vapor diffusion, corrosion protection, and hydrophobicity were confirmed, Cortec® R&D tested vapor diffusion and protection at different distances and durations. Using this information, they settled on the recommended spacing of injection points at 10-20 feet (3-6 m). Once the product was finalized, it was sent out for third-party testing in accordance with its USDA Certified Biobased Product label application. Results came back showing that CorroLogic® CUI Inhibitor Injection contains 100% USDA certified biobased content, and the label was awarded.



Fight CUI Without Removing Insulation

The final product, CorroLogic® CUI Inhibitor Injection, is a 100% Vapor phase Corrosion Inhibitor that can be directly injected into insulation in order to form a protective layer on the surface of the metal piping or equipment underneath. Thanks to Cortec's groundbreaking R&D, this new discovery will help facility managers fight CUI without the hassle of

removing insulation and seriously interrupting normal operations. Contact Cortec® to learn more about using CorroLogic® CUI Inhibitor Injection in your facility: <https://corrologic.com/contact-us/>

Keywords: CUI, corrosion under insulation, Cortec R&D, Vapor phase Corrosion Inhibitor, effective corrosion solutions, CUI corrosion inhibitor, USDA Certified Biobased Product, sustainability, CorroLogic, cost of CUI

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