

## **Product Data Sheet**

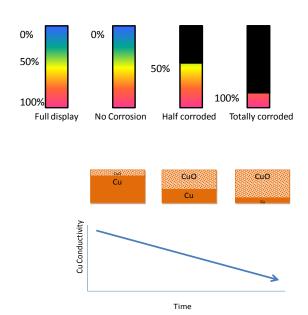
## What is a **CORROMETER** ™and what will it do for me?

The CORROMETER™ is a corrosion sensor that lets you know how corrosive the environment you put it in is. It can influenced on how fast it corrodes by the type of protection being used, for example, poly films, protective coatings, or volatile corrosion inhibitors etc. Basically, the Corrometer will let you know how effective those products are for protecting your asset(s).

In short, the CORROMETER™ actually allows you to know what the consequences are to your asset due to what <u>actually</u> happened during its environmental experience. Whatever it might be, i.e. rain, snow-salt mixtures, spills, corrosive vapors or chemicals etc. If you apply a protective coating to your asset, then place the same coating across the exposed metal of the CORROMETER and the CORROMETER™ will let you know how effective that protection is, given the environment it is placed in.

## How does the **CORROMETER™** work?

Corrosion is the oxidation process of metals. The CORROMETER™ works on the principle that ALL metal oxides will grow over time. As the oxide thickness increases it decreases the electrically conductive portion of the base metal, it is this decrease in conductivity that has been correlated to a color indicating window. The CORROMETER™ is an electrical resistance probe and is able to visually let you measure and see how fast the corrosion is occurring. You will be able to measure how well your protection (or no protection) is working, or if your protection should be increased.



Your metal, and the CORROMETER™ corrosion rate, will vary depending what the conditions the metal is exposed to, for example deserts are dry and corrosion rates are low, but an island in the ocean has humid air and salt in the air which will cause a significant increase in the corrosion rates.

## **Specifications**

Flame resistant polymer construction

Nominal corroding thickness 0.15 µm (.000005905")

Visual indicating corrosion scale (0-100%)

Individual and unique QR 2d bar code (For asset and inventory tracking, no duplicate bar codes, verification of bar code via web site, prevents counterfeiting)

Dimensions (nominal): 75 mm L x 15 mm H x 15 mm W, (3" L x 5/8" H x 5/8" W)

Model and Ordering #: Copper 9001, Tin 9002, Aluminum 9003

Colors: Copper - fluorescent orange, Tin - fluorescent green, Aluminum - fluorescent yellow

Working temperature range: -40° C - 65° C (-40° F - 150° F), Testing temperature should be conducted at 25° C ±10° (77° F ± 15°) for best results.

Testing temperature range: -40° C - 40° C (-40° F - 110° F) testing < 25° C (room temperature) will only slow the response time some, testing at -20° C/F had a response time ~ 4 seconds.

Weight: Approximately 55 grams (2 oz.)

Lithium (metal) Battery Content: .5 grams (0.02 oz.)

Shelf Life: 12 years

Packaging: Hermetically sealed and packaged in a metalized polyester bag

Shipping Category: Not regulated if shipping < 4 devices, > 4 devices follow IATA Packing Instruction 970 Sec. II For more info visit: http://www.iata.org/html\_email/CAR1001654/lithium\_batteries.pdf

Disposal: In accordance with local regulations, battery is Lithium metal, recycling code for box is

