# Boiler Lizard® Patent Pending VpCI® Boiler Lay-up



# **PRODUCT DESCRIPTION**

Cortec's Boiler Lizard contains Vapor phase Corrosion Inhibitor (VpCI) powder in a polyvinyl alcohol (PVA) water-soluble bag. The powder formulation is free of phosphates, heavy metals, nitrites, and free amines. Designed for dry lay-up of boilers, the Boiler Lizard powder protects metals in enclosed spaces. The VpCIs vaporize and adsorb on all metal surfaces, reaching all recessed areas and interior cavities.

### **FEATURES**

- Provides continuous corrosion protection during dry lay-up period
- Protects ferrous metals and aluminum
- Provides protection in the vapor phase (void), liquid phase, and the interface
- Up to 12 months protection
- Vapor phase inhibiting action protects inaccessible and recessed surfaces
- Requires little or no surface preparation for routine shutdown maintenance
- VpCI layer does not need to be removed prior to equipment start-up
- Eliminates need for other forms of protection including nitrogen blankets, silica gel, and hydrazine

- Reduces chemical consumption and costs
- Safe for handling
- Biodegradable, non-toxic and non-irritating PVA bags
- Increases worker productivity and safety
- Formulation is free of phosphate, heavy metals, nitrites, and free amines
- Protects up to 1,000 gallons system capacity per bag (5 yd³ or 3.8 m³)

#### METHOD OF APPLICATION

Completely drain and cool boiler down. Remove and discard outer protective water insoluble bag. Place Boiler Lizard flat in boiler and slit open the inner water soluble bag to begin total corrosion protection. Slit this inner bag 2" (5 cm) from one end to 2" (5 cm) from the other end. Seal all openings to the boiler internals. No product or inner bag removal is required prior to boiler start-up. When the boiler is put back in service, fill with water and employ common start-up procedure. The inner PVA bag will dissolve.

# **DIMENSIONS**

Tube 3" D x 37" H (8 cm x 94 cm) Bag 4" W x 34" H (10 cm x 86 cm)

### PHYSICAL PROPERTIES OF POWDER

Appearance White to off-white powder pH 6-7 (1% aqueous)
Melting Point 371°-398°F (188°-203°C)

# **PACKAGING AND STORAGE**

Boiler Lizards are supplied in carton tubes (1 bag per tube). Store in sealed container in a dry warehouse. Do not store in conditions above 130°F (54°C). Shelf life is 2 years.



### **PRECAUTIONS**

- Do not use on copper, copper-based alloys, and other soft yellow metals. Compatibility with non-metallics should be evaluated.
- Caking of powder may occur when it is exposed to moisture and then dried. The likelihood of this is increased when powder is exposed to high heat and multiple wet/dry cycles. When powder gets caked, baked, and hardened it requires removal by mechanical means or by aggressive acid clean. To avoid caking of powder do not over apply or unevenly disperse the dry powder. In aqueous applications make sure powder has been totally dissolved before using.
- Powder is not soluble hydrocarbon fluids. Rinse powder from vessels before adding hydrocarbon fluids.
- Powder should be removed from area, on each side of weld, before welding or other high temperature processing.

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT MATERIAL SAFETY DATA SHEET FOR MORE
INFORMATION

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