

INDUSTRIAL CORROSION INHIBITORS



Hoffman corrosion inhibitors protect

- Interior components of electrical enclosures, boxes, consoles and wireways
- Interior components of electronic enclosures
- Electrical and electronic equipment and controls
- Parts and components that are packaged in crates during shipping and storage
- Switch gear and relay cabinets
- Interiors of pipes, conduits and fuse boxes
- Process control computers, instruments and recording devices
- Tool chest interiors and contents
- Equipment stored at construction sites

Chief Advantages

- Protects against salt and high humidity
- Eliminates the need of oiling, plating or dipping metal
- Puts protected equipment to use immediately without degreasing or coating removal

How They Work

Each inhibitor contains a special chemical combination that vaporizes and condenses on all surfaces in an enclosed area. Vapors will redeposit as needed in the event of condensation of moisture on surfaces. These vapors reach every part of an enclosure, protecting all interior components. Spraying, wiping or greasing are not required. This eliminates pre-coating, special wraps and drying agents. Protection is effective even in salt-water atmospheres. The AHC15E and AHC110E emitters have additional red-metal inhibitors for further protection. Enclosures containing corrosion inhibitors must be reasonably sealed.

Life Expectancy and Usage

The normal useful life-span of Hoffman corrosion inhibitors is in excess of one year. However, inhibitor life expectancy is shortened by approximately 25 percent when exposed to temperatures above

104 F (40 C). This product is not recommended for use where temperature exceeds 199 F. Since Hoffman corrosion inhibitors are vapor-phase protective, all surfaces to be protected should be accessible to the vapors. The maximum distance the vapors can travel is approximately 1.50 ft. (.46 m). Protection of long, narrow enclosures can be achieved with tape or multiple inhibitors.

Storage and Handling

Each Hoffman corrosion inhibitor is individually packaged in a resealable bag for maximum effectiveness at the time of usage. Corrosion inhibitors should be stored at temperatures not exceeding 120 F (45 C ). Hoffman corrosion inhibitors are not returnable.

When determining the proper corrosion inhibitor for your application, assume the enclosure volume to be protected is greater than calculated if (1) cabinet doors are opened frequently, (2) cabinet is located in an extremely corrosive area and/or (3) cabinet length divided by depth is greater than four.

AHC11DV

Foam device protects one cubic foot (28 liters) of enclosure volume for approximately one year.

Size: .25 x 1.25 x 3.00 in. (6 x 32 x 76 mm)

AHC15E

Emitter protects 5 ft.<sup>3</sup> (142 liters) of enclosure volume for approximately two years from the date of manufacture. Emitters contain additional red metal (non-ferrous) inhibitors.

Size: 2.31 in. (diameter) x 0.81 in. (high) (59 mm x 21 mm)

AHC110E

Emitter protects 10 ft.<sup>3</sup> (283 liters) of enclosure volume for approximately two years from the date of manufacture. Emitters contain additional red metal (non-ferrous) inhibitors.

Size: 2.31 in. (diameter) x 1.38 in. (high) (59 mm x 35 mm)

AHC160R

Tape protects 60 ft.<sup>3</sup> of enclosure volume per roll. Use approximately 2.50 in. (63 mm) of tape per cubic foot (28 liters) of enclosure volume to be protected. Each roll of tape is packaged individually in a resealable bag.

Size: .25 in. x .75 in. x 12.00 ft. (6 mm x 19 mm x 3.6 m)

AHC1240R

Tape protects 240 ft.<sup>3</sup> of enclosure volume per roll. Use approximately 1.00 in. (25 mm) of tape per cubic foot (28 liters) of enclosure volume to be protected. Each roll of tape is packaged individually in a resealable bag.

Size: .25 in. x 2.00 in. x 20.00 ft. (6 mm x 51 mm x 6.1 m)

AHC1238S

Spray is a non-conductive, nonflammable, vapor-phase film and is non-toxic. It has essentially neutral pH value. Application provides instant protection against corrosion. Spray is water soluble and can be easily flushed away with water if desired. This product should be kept from freezing and has a shelf life of 2+ years in normal warehouse conditions.

Standard Product

| CATALOG NUMBER | Enclosure Volume Protected (ft. <sup>3</sup> ) | Enclosure Volume Protected (liters) | Package Qty. |
|----------------|------------------------------------------------|-------------------------------------|--------------|
| AHC11DV        | 1                                              | 28.32                               | 50           |
| AHC15E         | 5                                              | 141.60                              | 25           |
| AHC110E        | 10                                             | 283.20                              | 12           |
| AHC160R        | 60 per roll                                    | 1699 per roll                       | 3            |
| AHC1240R       | 240 per roll                                   | 6797 per roll                       | 1            |
| AHC1238S       | Corrosion Inhibitor Spray                      | Corrosion Inhibitor Spray           | 6            |

Metal Protection Chart

| Metal               | Protected by Chemical                          | Unprotected by Chemical                 |
|---------------------|------------------------------------------------|-----------------------------------------|
| Aluminum            | Marked reduction of surface attack; no pitting | Severe surface attack; tarnish; pitting |
| Brass <sup>a</sup>  | Decreased tarnish; very minor surface attack   | Surface discoloration; pitting          |
| Steel, Iron         | No change                                      | Severe corrosion                        |
| Copper <sup>a</sup> | Slight staining                                | Heavy corrosive attack                  |
| Zinc Plate          | Slight discoloration                           | Severe corrosion                        |
| Tin Plate           | Slight discoloration                           | Moderate corrosive attack               |

<sup>a</sup> AHC15E and AHC110E emitters are recommended for these materials



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travel is approximately 1.50 ft. (.46 m). Protection of long, narrow enclosures can be achieved with tape or multiple inhibitors.

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### AHC11DV

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### AHC15E

Emitter protects 5 ft.<sup>3</sup> (142 liters) of enclosure volume for approximately two years from the date of manufacture. The useful life (protection) depends on the moisture surrounding the application. Severe environments recommend no more than 3 months before replacing, less severe recommend no more than 6 months before replacing. Emitters contain additional red metal (non-ferrous) inhibitors.

Size: 2.31 in. (diameter) x 0.81 in. (high) (59 mm x 21 mm)

### AHC110E

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Size: .25 in. x 2.00 in. x 20.00 ft. (6 mm x 51 mm x 6.1 m)

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### BULLETIN: A80

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| AHC160R        | 60 per roll                                    | 1699 per roll                       | 3            |
| AHC1240R       | 240 per roll                                   | 6797 per roll                       | 1            |
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