

## INDUSTRIAL CORROSION INHIBITORS



nVent 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 AHCI5E and AHCI10E 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 nVent 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 nVent 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.

### AHCI1DV

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)

### AHCI5E

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)

### AHCI10E

Emitter protects 10 ft.<sup>3</sup> (283 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 1.38 in. (high) (59 mm x 35 mm)

### AHCI60R

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)

### AHCI240R

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)

### AHCI238S

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.

### BULLETIN: A80

### Standard Product

Catalog Number	Enclosure Volume Protected (ft. <sup>3</sup> )	Enclosure Volume Protected (liters)	Package Qty.
AHCI1DV	1	28.32	50
AHCI5E	5	141.6	25
AHCI10E	10	283.2	12
AHCI60R	60	1699	3
AHCI240R	240	6797	1
AHCI238S	50	1416	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> AHCI5E and AHCI10E emitters are recommended for these materials

**EPOXY PATCH KIT**



Applications include sealing rivets, bolts, metal joints, seams and welds, cement cracks, pipe couplings, joints and tees. Each kit has two containers of material and application instructions. When the resin and hardener are mixed, a gray epoxy is formed which cures at room temperature, has high adhesion and will not sag. It is resistant to oils, acids and chemicals.

**BULLETIN: A80**

Catalog Number	Description
A307	Epoxy Patch Kit

**TOUCH-UP PAINT**



nVent HOFFMAN touch-up paint is used to repair the finish of enclosures and panels. Furnished in 12-oz. spray cans.

**⚠ WARNING: Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**BULLETIN: A80, DACCY, P20**

Catalog Number	Color
ATPWE	Hoffman #60 White
ATPW	RAL 9003 Signal White
ATPTW	RAL 9016 Traffic White (S094)
ATPPW	RAL 9010 Pure White
ATPC	RAL 9001 Cream
ATPOW	RAL 1013 Oyster White
ATPGW	RAL 9002 Gray White (IH148)
ATPLI	RAL 1015 Light Ivory

Catalog Number	Color
ATPDLB	Hoffman #78T DesignLine Beige Enamel
ATPG7035	RAL 7035 Light Gray (T012)
ATPPG	RAL 7032 Pebble Gray
ATPOF	RAL 9002 Gray White (S065)
ATPLG	RAL 7035 Light Gray (S052)
ATPAG	RAL 7038 Agate Gray
ATPLGA70	ANSI 70 Light Gray
ATPPY61	ANSI 61 Hoffman Standard Gray
ATPDG	ANSI 49 Dark Gray
ATPSG	Satin Gray Enamel
ATPMG	Hoffman #82 Slate Gray Enamel
ATPHS61	High Solids ANSI 61 Gray
ATPFG	Light Gray for fiberglass
ATPG7032	RAL 7032 Gray
ATPSY	#5. YB.0/12 OSHA Safety Yellow
ATPR	RAL 3001 Signal Red
ATPO	RAL 2004 Pure Orange
ATPSB	RAL 5015 Sky Blue
ATPSAB	#2.5PB3.5/10 OSHA Safety Blue
ATPB	RAL 5005 Signal Blue
ATPRG	RAL 6011 Reseda Green
ATPOG	RAL 6003 Olive Green
ATPMGN	PSPL350001 Munsell Green
ATPMB	#2.5Y 5/2 Munsell BrownB
ATPB9005	RAL 9005 Black
ATPB7021	RAL 7021 Black
ATPBM	RAL 9005 Jet Black (T009)
ATPBS	F63VXW8736 SW Cream
ATPJB	RAL 9005 Jet Black (S067)
ATPBG	RAL 7012 Basalt Gray

**TOUCH-UP PAINT PENS**



nVent HOFFMAN touch-up paint pens are used to repair the finish of enclosures and panels. Furnished in .33-oz. pens.

**BULLETIN: A80**

Catalog Number	Paint Color
ATPG7035LP	RAL 7035 Light Gray
ATPW60HGP	Hoffman #60 White
ATPG20GLP	ANSI 61 Gray