

Copper Preventive Coating For Air Conditioners





Two component Hybrid **Technology (BLUE)**

Oxycoats Anti-Rust Coating is a two pack high performance coating specially designed to protect copper from gas leakage due corrosive environment like humidity, salt, sulphur and other industrial contaminants.





Product Highlights:

- >> Passes 3000 hrs of salt spray as per ASTM B-117
- >> Excellent corrosion and chemical resistance
- >> Superior mechanical and adhesion properties
- >> Excellent UV and water resistance

Applications:

>> To be applied on U-bends, copper tubes and brazing joints of HVAC coils. Suitable for window & Split Ac's, VRF outdoors, ductables and cassettes

How to use:

- >> Remove any dust or dirt using sand paper.
- >> Mix part A and part B in a paper cup and apply using brush within 20 min else product will become hard.
- >> Mixing ratio 2:1 (Part A:PartB)
- >> Drying time 4 to 6 hours
- >> Do not switch on the AC overnight after coating for best results *to be used under supervision of service engineer



Test Results

Standard Test	ASTM Standard	Results/Data
% NVM	ASTM D1353	100% solids
Impact Resistance Weight = 1593.6g	ASTM D2794	Impact Energy = 4.68 J No stress marks or cracking
Salt Fog Test Test Duration: 3000 hours. DFT- 50-60 µm	ASTM B117-18	No any sign of Blistering, Rusting, Discoloration & Delamination
Pencil Hardness	ASTM D 3363	6H
Cross Hatch Adhesion	ASTM D3359	5B
Taber Abrasion Test 1000 cycles, CS-17 Wheel, 1Kg load	ASTM D4060	0.044g
Chemical Resistance	Acid-Passes Alkali-Passes	

TYPES OF CORROSION IN HVAC COILS

General Corrosion

- Unprotected copper tubes in polluted industrial environments can lead to tube leaks and failure of the refrigeration system.
- Sulfur and nitrogen based electrolytes in combination with chloride environments are often the cause of accelerated corrosion of these metals.



Galvanic Corrosion

Galvanic corrosion occur when dissimilar metals, in contact, are exposed to an electrolyte. Common electrolytes may include chloride contaminants from sources such as seawater, road salts, pool cleaners, laundry facilities and household cleaning



Pitting Corrosion

Pitting corrosion is most often caused by exposure to fluoride or chloride. Fluoride is present in municipal water supplies, while chloride is found in coastal areas. The ions attack the metal, forming pits that form pinholes, causing the coils to leak refrigerant.



Formicary Corrosion

Formicary corrosion is typically caused by exposure to acetic or formic acids. These acids are present in a host of household products including cleaning solvents, insulation, adhesives, paints, plywood etc. This type of corrosion presents itself as black or blue-gray deposits. Formicary corrosion creates tunnels within the tubing that result in pinholes forming in the coils, again often leading to a refrigerant leak





Crevis Corrosion

Crevis corrosion refers to the localized attack on a metal surface at, or immediately adjacent to the gap or crevice between two joining surfaces.



