

**IC-5050™ PROTECTIVE COATING**  
**for METAL-LEAF and WOOD**  
**Composition And Properties**

IC-5050™ is a waterborne copolymer coating that is dominantly acrylic for interfacial adhesion in a metal leaf protective application. The IC-5050 acrylic is alkane or "straight-chain" in chemistry. The alkane chemistry is required as compared to "cyclic" resin structures which all darken over time toward that amber color which changes appearances quite radically.

This acrylic polymer is, however, modified with an alkane urethane. This is because data in the RJSC lab and from an international resin company show that 100% of known acrylics, over 20 years of time on [outside] architectural settings, seem to "age without grace" in terms of brittleness and micro-cracks. The correct copolymer system will not micro-crack.

This copolymer system has extremely fine adhesion to both metal and wood, and it is water borne. The end result is a very high physical exclusion of air and airborne contamination. But even the finest resin films will, over time, transmit molecular gases.

Therefore, the IC-5050 resin integrity is additionally made "metal protective" by incorporated additives. These include a unique organic anti-oxidant made for NASA circuit board protection. This is specifically effective on copper, brass, aluminum, bronze and nickel alloys, and prevents predictable oxide discolorations that, with time and oxygen, develop on bare metals. In the case of NASA, their copper boards are prevented from circuit-destructive oxidation.

If further technical information is needed, please contact RJSC.