



**System Options**

**Aerowave® 2001 - Primer (Metallics & Non-Metallics)**

Designed for metallic and non-metallic substrates, this primer is a waterborne, two-component, corrosion inhibiting, chromated amine-cured epoxy primer that is easily mixed and applied for an extremely durable and fast-curing primer finish.

**Aerowave® 2002 - Primer (Composites)**

Designed for composite substrates, this primer is a waterborne, two-component, non-corrosion inhibiting, chrome-free amine-cured epoxy that provides a flexible, smooth surface with remarkable adhesion along with the ease of soap & water clean-up.

**Aerowave® 2500 - Pore-Filler**

Aerowave® 2500 is the ideal pore-filler for composite substrates. This waterborne, non-corrosion inhibiting, chrome-free amine-cured epoxy filler is excellent for filling tiny pore holes in composite substrates, ultimately providing a smooth, finish ready for painting.

Aerowave® Structural Next Generation Waterborne Coatings are designed to meet all of today's OEM structural maintenance requirements. For complete, up-to-date specifications please go to our web site at [www.anac.com](http://www.anac.com)

**Aerowave® 2501 - Stopper**

Designed for filling larger holes, gaps or cracks in composite substrates, Aerowave® 2501 is a solvent-free, ultra-high solids (>97%) stopper that aids in preparing an excellent, smooth surface ready for painting.

**Aerowave® 3003 - Primer/Topcoat (Interior)**

As a primer/topcoat for the interior structures of an aircraft, Aerowave® 3003 is a waterborne, two-component, chemical resistant amine-cured epoxy with good layer thickness control and a fast curing time no matter the method of curing.

**Aerowave® 5001 - Finish (Exterior & Interior)**

Aerowave® 5001 is a two-component, waterborne polyurethane finish that is flexible and easy to mix and provides good substrate wetting properties along with exceptional sag resistance with a layer thickness of only 15-20 µm (45-50 µm wet).

**A Better Choice for the Environment**

Ease environmental concerns with the low VOC, water-based choice that provides less application waste and the opportunity for less fuel consumption in service. The next generation Aerowave® Series also provides:

- Up to 75% less chromates
- Less waste
- Less paint consumption
  - Aids in complying with solvent emission regulations
- Up to 20% less coating weight
  - Less weight on an aircraft = less fuel consumption
- Waterborne technology
  - Safer for the environment
  - Less organic solvent (VOC) emissions
  - Reduction of hazardous materials



Up to 20% less coating weight  
**Better for the environment**  
 Up to 75% less chromates  
 Waterborne technology



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**Aerowave® Series**  
 Next Generation Structural  
 Waterborne Coatings



Most of the internal, structural parts of an aircraft are sealed into areas of the structure that will never be accessed again during the life of the airframe which can be as long as 30 years. As such, the materials used to protect these parts need to have exceptional chemical and corrosion resistance along with flexibility to ensure the integrity of the paint film as the aircraft flexes during flight.



**Technology** The Next Generation Aerowave® Series of Structural Waterborne Coatings are formulated to optimize process/application time, waste, and coating weight.



The next generation Aerowave® Series of Structural Waterborne Coatings provides these features along with optimal process/application time for OEM's (Original Equipment Manufacturers) while simplifying the mixing process as well as providing the peace of mind that comes with a coating that can last more than 30 years. For application on both metallic and composite components, the complete Aerowave® Series system includes:

- Primer
- Topcoat
- Pore Filler
- Stopper

OEM's, their sub-contractors, and ultimately their customers (aircraft owners/airlines) greatly benefit from the Aerowave® Series next generation of Structural Waterborne Coatings.

**OEM's and Sub-Contractors**

- Reduce process times and costs with:
- Optimized Curing Time /Temperature Balance
  - Increased Industrial Opacity
  - Reduced Waste
  - Consistent Quality
  - Simplified Mixing

**Airlines/Aircraft Owners**

- Reduced dry film weight
  - A reduced film weight and increased industrial opacity allows for the opportunity of applying less material, which can reduce aircraft weight and, in turn, fuel consumption
- Increased Durability
  - Less frequent repairs
  - Reduces AOG time overall

**Optimized Film Formation (Coalescence)**

- Obtain better adhesion no matter what new substrate or pre-treatment.
- Better substrate wetting properties
  - Good layer thickness control
  - Better adhesion & flexibility
  - Compatible with new substrates & pre-treatments
    - Chrome-Free chemical conversion coating
    - Chrome-Free anodizing process
  - Consistent film properties during pot life
  - Less sensitive to substrate contamination

**Optimized Curing**

- Fast curing at ambient conditions
  - Dry to dust: 30-60 minutes (23°C, 73°F)\*
  - Dry to recoat: 60-120 minutes (23°C, 73°F)\*
  - Fast forced cure properties; chemical resistant
    - 5 minute flash-off time, 30 minutes at object temperature of 60°C, 140°F)\*
    - 5 minute flash-off time, 20 minutes at object temperature of 80°C, 176°F)\*
  - Equal performance whether air-dried or force cured
- \*If optimal air movement is applied

**Optimized Application**

- Compatible with all conventional, plural, and next generation spray equipment
- Compatible with water-based electrostatic spray equipment
- Required layer thickness for some OEM's only 15-20 µm (45-60 µm wet)
- One closed layer at low film thickness
- Clean-up with water and/or solvent
- Excellent application performance in high/low temperatures/humidity
- Exceptional sag resistance

**Optimized Pot Life**

- Less reaction during pot life due to independently stabilized base and hardener components
- Pot life up to 6 hours at ambient conditions
- Reduction of waste materials

**Reduced Process/Application Time**

Mixing preparation for first and second generation structural coatings is complicated, time-consuming, and can be expensive. Mixing at high and medium shears requires constant mechanical agitation. This means investing in special mixing equipment. Additionally, the products are difficult to mix in two component spray equipment. This can lead to poor film formation and film faults. Higher shear mixing can also lead to higher waste due to gelling. Moving to Aerowave® Series Next Generation Structural Coatings make mixing preparation easier with the ability to be mixed manually or automatically, a consistent quality with low or high shear mixing, a homogenous mixture during pot life, and only 2 components to mix versus 3 plus water with previous generation coatings.

**First Generation**



**Second Generation**



**Next Generation Aerowave® Series - Structural Waterborne Coatings**



**Optimized Mixing Properties**

- Former structural primers had a higher viscosity, which requires frequent mixing and additional solvent to prepare the paint for application. The next generation Aerowave® Series has:
- Extremely consistent shelf life - no settlement
  - The ability to be mixed manually or automatically (Plural mix spray equipment)
  - Consistent quality with low or high shear mixing
  - Homogenous mixture during pot life
  - No need for additional water
  - Only 2-components vs. traditional 3-4 component products

**Superior Support**

ANAC's various locations and vast number of distribution partners allow for fast delivery no matter where an aircraft is being built or repaired. High-quality technical support is also available for added convenience and peace of mind. To find out more about the next generation Aerowave® Series of Structural Waterborne Coatings, visit us on-line at [www.anac.com](http://www.anac.com) or call your local ANAC representative.

