

# STAT-REZ® ESD NANO 375



PRODUCT DATA SHEET

## **PRODUCT DESCRIPTION**

APF STAT-REZ ESD NANO 375 is a 100% solids two-component, high-performance, epoxy floor coating, utilizing NANO WISE® Technology, designed to impart electrostatic conductive qualities to floor surfaces in conjunction with ESD compliant footwear. The system is designed to provide static control properties for personnel, ESD compliant wheeled equipment and chairs, which limits the ability of personnel to build up electrostatic charges on their person by providing effective equipotential grounding. This coating features excellent light reflection, exceptional abrasion and scratch resistance, ease of cleaning, and excellent resistance to a broad range of chemicals.

APF STAT-REZ ESD NANO 375 is formulated to conform to ANSI S20.20–2021 Product Qualification and Performance Verification requirements when used with APF STAT-REZ 175 ESD NANO Conductive Primer. Surface resistance is not affected by relative humidity.

Meets most DOD and Military standards. Contact APF Technical Service for complete compliance information.

#### **USES**

- Electronics Manufacturing and Assembly
- Military/ Aerospace/ Aircraft Hangars
- Hazardous Industries (dust or explosion hazards)
- Clean Rooms
- Pharmaceutical Facilities

#### **ADVANTAGES**

- NANO WISE Technology provides exceptional ESD performance
- Highly reflective, easily cleaned surface
- Resistant to common industrial chemicals
- Full 12 month shelf-life, no settling or shipping limitations
- Monolithic, seamless, non-porous
- More durable than ESD tile or sheet goods, no joints to fail.
- Low Maintenance, no topical ESD treatments required.

#### **COLORS**

Black	Butt	Light Gray	Slate

Concrete Gray Sterling Blue Medium Gray

TECHNICAL DATA				
Solid Content by Volume	100%			
Impact Resistance	120/180 inch/lbs			
Taber Abrasion 1000 g load/1000 cycles/CS17 Wheel	<35 mg loss			
Adhesion to Concrete ASTM D7234	>350 PSI/Concrete Failure			
Mixing Ratio by Volume	Mix Full Kits Only			
VOC¹	<50 g/l			
Cure Times (77°F/25°C)				
Working Time	~ 20-25 Minutes			
Dry To Touch	~12 Hours			
Recoat	~12-24 Hours			
Light Traffic	24 Hours			
Full Cure	7 Days			
Electrical Properties				
Electrical Resistance per ANSI S7.1 – 13 <sup>2</sup>	$2.5 \times 10^4 \text{ to } 1.0 \times 10^6$ Ohms			
Body Voltage Generation ANSI ESD 97.1	<15 Volts <sup>2</sup>			
Meets ANSI S20.20 – 2021 Product Qualification & Performance Verification <sup>3</sup>				
<sup>1</sup> Meets the VOC requirements for SCAQMD Rule 1113 for floor coatings <sup>2</sup> When applied with Stat-Rez 175 ESD NANO Conductive Primer <sup>3</sup> With compliant footwear or shoe grounders, properly worn and in good working condition				
Higher temperature and lower humidity will shorten cure time.  Lower temperatures and higher humidity will increase cure time.				

#### **PACKAGING**

required.

Supplied in complete 1.5 gallon (5.7L), 3.0 gallon (11.35L) & 15 gallons (56.8L) total by volume kits, consisting of A & B components. Product is factory pigmented. Use only as complete mixed unit, do not break down units.

If 24 hour recoat window exceeded, substrate recoat preparation

## **COVERAGE**

Coverage Rate: 80-100 sqft/gallon (16-20 mils WFT)





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## **CONCRETE MOISTURE**

It is the applicators responsibility to test for concrete moisture in accordance with ASTM F2170-19. If moisture is indicated to be in excess of 85%, apply APF VaporSolve system in accordance with the published system data sheet. Consult APF Technical Service for further information.

## **GROUNDING**

Prior to beginning application, confirm that the grounding points have been placed in accordance with the project specifications.

## **SURFACE PREPARATION**

Concrete must be cured for at least 30 days be clean, structurally sound, and free of wax, loose coatings or curing compounds. Concrete should be properly prepared to achieve a surface Minimum Texture of ICRI/CSP 2-3. Refer to ICRI technical guidelines 310-330 Selecting and specifying concrete surface preparation for sealer, coatings, polymer overlays, and concrete repair. Vacuum the prepared concrete surface to remove all dust. Acid etching is not recommended and will void manufacturers' warranty.

## **PRIMING (Non-Conductive):**

Prepared concrete must be primed before application of APF STAT-REZ ESD NANO 375. Prime prepared concrete with APF EPOXY 400. Substrate surface must be completely sealed and cured before application of subsequent coats. Apply APF EPOXY 400 in accordance with the product data sheet.

Existing ESD surfaces should have an isolation layer of epoxy primer applied prior to application of APF STAT-REZ ESD NANO 375.

# **PRIMING (Conductive):**

APF STAT-REZ ESD NANO 375 will create a static-dissipative surface without the use of a conductive ground plane. Prime prepared concrete with APF Epoxy 400 in accordance with the product data sheet. Surface resistance\* will be  $\sim 1.0 \times 10E7$  ohms point-to-point without a conductive ground plane. Application of APF STAT-REZ ESD NANO 175 Conductive Primer will produce a floor surface with resistance values of  $< 1.0 \times 10E6$  ohms, typically  $\sim 1.0 \times 10E5$  ohms.

Refer to the APF STAT-REZ ESD NANO 175 Conductive Primer product data sheet for complete application instructions.

\*Per ANSI S7.1, when installed in accordance with the published technical data.

## MIXING

Thoroughly pre-mix part A before adding the part B. Combine components and mix for 2-3 minutes using slow speed drill, scraping the bottom and sides of the mixing container. It is important to NOT whip air into the material while mixing. Material cannot be properly mixed by hand. Apply material immediately after complete mixing.

## **APPLICATION**

Apply STAT-REZ ESD NANO 375 at a rate of 80-100 sqft/gallon (16-20 mils WFT). Apply with notched squeegee and a quality solvent resistant 3/8-inch nap roller cover. At a uniform thickness to ensure consistent appearance.

An applicator wearing spiked shoes will back roll the wet material using a quality solvent resistant 3/8-inch nap roller cover to distribute the material uniformly. The material must be thoroughly rolled twice to achieve optimal substrate wetting {using North-South, East-West Method.} Keep application areas as small as possible, to prevent long tiein times. Application under 16 mils will produce an "orange peel" type texture.





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## **CLEANING**

APF STAT-REZ ESD NANO 375 conductive and static-dissipative flooring systems require specific cleaning procedures to ensure that the flooring surface maintains the highest level of conductivity.

Sweep as necessary and dust mop with a quality micro-fiber type mop head. Frequent dust mopping will extend the life of the floor and permit the lowest resistance between the floor surface and ESD footwear, wheels, and casters.

Use only cleaning agents that leave no residue after rinsing. Mechanical scrubbers may be used with pads no more aggressive than 3M brand White Super Polish Pad 4100, or equal.

Never use wax, acrylic finishes, polishes, or other film-forming products. A properly cleaned APF STAT-REZ ESD NANO 375 floor should never require additional ESD treatments. Beware of processes that may impart a non-conductive residue on the floor, such as adhesives and paint.

## **LIMITATIONS**

- Not for vertical or deeply sloped surfaces.
- Electrical performance (surface resistance, resistance to ground, body-voltage generation) is a function of surface cleanliness, and the condition of ESD shoe grounders and footwear.
- Before applying, measure and ensure that the ambient temperature is at least 5°F above the dew point..
- Do not thin this product. Addition of thinners is not necessary and will void Manufacturer's warranty.
- Use of kerosene or propane forced air heating equipment during application may cause discoloration and finish defects.

## **SHELF LIFE**

Part A: 12 months at 50-85°F { 10-30°C} Part B: 12 months at 50-85°F { 10-30°C}

\*When kept at recommended storage conditions and in original unopened containers. DO NOT ALLOW TO FREEZE. Frozen material is unusable and must be properly disposed of.

## **HANDLING, SAFETY & STORAGE**

- Avoid contact with skin; wear protective gloves. Application personnel must read and fully understand product Safety Data Sheet before using. APF Safety Data Sheets are available at www.apfepoxy.com.
- Store away from heat sources. Store between 50°F and 85°F (10°C-30°C). DO NOT FREEZE. Frozen material is unusable and must be properly disposed of.

APF Stat-Rez ESD Nano 375 PDS 11.10.25

## STANDARD WARRANTY STATEMENT

ICP Construction, Inc. ("we" "us" or "our"), manufacturer of Arizona Polymer Flooring, warrants that the product is produced within specifications and is free from defects in material only. No warranty shall be in effect until our Terms and Conditions of Sales (https://www.icpgroup.com/wp-content/uploads/ICP-Group-Terms-and-Conditions-of-Sale.pdf) are met, including payment and cooperative promotional considerations. We warrant that the covered product is free of defects in material only and suitable for the specified purpose for a period of one (1) year from the date of shipment, provided the product is (a) installed within its published shelf life, in strict conformance with specifications, and (b) handled, stored, mixed, and applied in accordance with our written instructions. It is your responsion sibility to initiate any claim against this warranty within the time frame specified below. If we determine that the product meets the requirements of this warranty, then we will, at our sole discretion, either refund the purchase price of the product or provide replacement product, in each case not to exceed the affected area as determined by our authorized technical representative. To obtain replacement or refund you must (a) provide timely written notice to us specifying in detail the non-conformity suspected (no later than five (5) working days after discovery), and (b) provide proof of purchase. We reserve the right to inspect the product prior to replacement. EXCEPT FOR THE EXPRESS WARRANTY ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. IN NO EVENT SHALL WE OR OUR AFFILIATES BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY NATURE, REGARDLESS OF THE FORM OF ACTION OR THEORY OF LAW, INCLUDING, WITHOUT LIMITATION, BREACH OF ANY OBLIGA-TION OR WARRANTY IMPOSED ON US HEREUNDER OR IN CONNECTION HEREWITH, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES IN ADVANCE AND EVEN IF A REMEDY SET FORTH HEREIN IS FOUND TO HAVE FAILED OF ITS ESSENTIAL PURPOSE. "CONSEQUENTIAL DAMAGES" SHALL INCLUDE, WITHOUT LIMITATION, LOSS OF USE, INCOME, OR PROFIT, OR LOSSES SUSTAINED AS THE RESULT OF INJURY TO ANY PERSON, OR LOSS OF OR DAMAGE TO ANY PROPERTY (INCLUDING, WITHOUT LIMITATION, PROPERTY HANDLED OR PROCESSED THROUGH THE USE OF THE PRODUCTS), DAMAGES OR LOSSES RESULTING FROM CLAIMS OF OTHER PERSONS AGAINST YOU, OR DAMAGES OR LOSSES SUSTAINED AS THE RESULT OF WORK STOPPAGE, OR REMOVAL AND REPLACEMENT COSTS AND COSTS OF LABOR. IN NO EVENT SHALL OUR LIABILITY ARISING IN CONNECTION WITH OR UNDER THIS WARRANTY (REGARDLESS OF THE FORM OF ACTION OR THEORY OF LAW) EXCEED THE AMOUNT PAID BY YOU FOR THE DEFECTIVE PRODUCT ONLY. THIS LIMITED WARRANTY PROVIDES YOUR EXCLUSIVE REMEDY FOR ANY DEFECT IN THE PRODUCT. If you do not agree with these terms, you may return the product within thirty (30) days of purchase for a full refund, provided the product is not opened, altered, or adulterated in any manner, less any shipping and handling charges of any sort. Use of the product, or retention of the product beyond thirty (30) days, constitutes your acceptance of this limited and exclusive warranty. No customer, distributor, or representative of ours is authorized to change or modify the published data sheets or this warranty in any way. No one is authorized to make oral warranties on behalf of us.

