

N59111 Polyurethane Anti-Static Coating Type I

Product Description

N59111 is a two pack polyurethane coating, designed to enable the discharge of static electricity from a variety of surfaces.

- Conventional solids
- Excellent flexibility
- High conductivity, low resistivity ($\leq 50K\Omega$)
- For general use - NOT suitable for use on radomes or antennae

Components



	MIX RATIO	BY VOLUME	BY WEIGHT
Base:	N59111 (43322928)	5.5 parts	5 parts
Activator:	N39/1327 (07169000)	1 part	1 part
Thinner:	N39/3460 (09099000)	to viscosity	2.4 parts

Specifications



N59111 is listed on:

- 80-T-35-5256
- ABP 4-2125

N59111 meets the performance requirements of:

- AIMS 04-04-005

Product Compatibility

N59111 is compatible with the following primer specifications:

- AIMS 04-04-001
- AIMS 04-04-002

Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.

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Surface Preparation and Pretreatment



Ensure surface is clean, dry and intact using a high performance cleaner. DeSoto® CN20 or Desoclean™ 45 solvent cleaners are recommended. Observe recommended overcoating windows for primers and / or intermediate coat. Applicable to all types of composite materials previously treated with a chromate-free primer. Prior to application of N59111, sand with abrasive paper grade 340 or 400.

Instructions for Use



Hand stir or shake the base to ensure all components are adequately dispersed. Add the activator to the base. Thoroughly stir until a smooth uniform mix is obtained. Allow 15 minutes induction before addition of required thinner and stir well before use.

Note: All products and components should be placed in ambient conditions of 15-30°C (59-86°F) for at least 24 hours prior to mixing and application.



Induction Time:

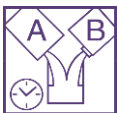
15 minutes (before thinning)



Viscosity: (23°C/73°F)

• AFNOR4	16 - 18 seconds
• BSB3	30 - 35 seconds
• FORD4	15 - 17 seconds
• ISO3	50 - 70 seconds
• ISO4	22 - 32 seconds
• ZAHN2	20 - 22 seconds

Note: Viscosities quoted are typical ranges obtained when using specified mix ratio.



Pot Life:

8 hours @ 21 - 25°C (70 - 77°F)

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Application Guidelines

Recommended Application Conditions:

Temperature 15 - 35°C (59 - 95°F)
Relative Humidity 20 - 85%

Application:

Apply three light coats, allowing three minutes flash off between each coat to achieve a total dry film thickness of 35-45 µm

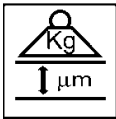


Theoretical Coverage: (ready for use)

7 m²/Lt @ 40 µm dry film thickness
280 ft²/US gal @ 1.6 mil dry film thickness

Recommended Dry Film Thickness:

35 - 45 µm
1.4 - 1.8 mil



Dry Film Density:

1.2 g/cm³
10.2 lbs/US gal

Dry Film Weight:

49 g/m² @ 40 µm dry film thickness
0.010 lbs/ft² @ 1.6 mil dry film thickness

Note: These application guidelines represent PPG's best advice for usage in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.

Equipment: N59111 is compatible with most types of current spray equipment.



Equipment Type	Tip Size	Air Pressure
Airmix	1.3 to 1.5mm	44 to 73 psi (3 to 5 bar)



N59111 is NOT suitable for application using airless or electrostatic equipment and is NOT suitable for application by brush, roller or dipping.

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use. DeSoto® CN20, CN44 or Desoclean™ 45 solvent cleaners are recommended.

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Physical Properties

**Colour:**

Black

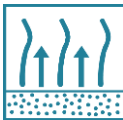
**Gloss:**

15 - 30 units with a 60° gloss meter



Drying Times @ 50% Relative Humidity	23°C (73°F)	70°C (158°F)
Dry to Touch	2 hours	
Dry to Handle	4 hours	45 minutes
Dry to Overcoat	2 hours (min.) 72 hours (max.)	
Full Cure	7 days	3 hours

Note: Drying times listed above are dependent upon film thickness applied, air flow conditions and application technique.

**Flash Off Time:**

30 minutes prior to force drying

**VOC: (ASTM)**

Mixed (unthinned)	640 g/Lt
N59111 Base Component	710 g/Lt
N39/1327 Activator	270 g/Lt
N39/3460 Thinner	870 g/Lt

**Flash Point:**

N59111 Base Component	31°C (88°F)
N39/1327 Activator	38°C (100°F)
N39/3460 Thinner	2°C (36°F)

Shelf Life:

N59111 Base Component	24 months in original unopened container
N39/1327 Activator	24 months in original unopened container
N39/3460 Thinner	10 years in original unopened container

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Note: Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Storage Recommendations



Inspect the condition of the container to ensure compliance. The material should be stored at temperatures between 5°C to 35°C (41°F to 95°F) to ensure shelf life.

Note: When procuring to a qualified material specification, follow those storage instructions.

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Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at: www.ppgaerospace.com

For sales and ordering information call the local PPG office at the numbers listed below:

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