# Technical Data Sheet Aerospace Coatings



# N39/1794 Electrical Insulating Acrylic Lacquer

# **Product Description**

N39/1794 is a single pack electrical insulating acrylic lacquer designed for use both as an electrical insulating coating and a protective coating for identification markings, labels and emblems on aircraft. N39/1794 can also be used as a water resistant wood varnish for aerospace purposes.

- Fast drying
- Excellent flexibility
- Excellent weather resistance
- Fungal resistant
- Used on armature windings, circuit boards, coils and components within radio apparatus

## **Components**



#### Mix Ratio (by volume)

Base: N39/1794 2 parts
 Thinner: N38/4056 (0920/9000) 1 part

# **Specifications**



N39/1794 is qualified to:

BS 5X 17

N39/1794 meets the performance requirements of :

Def Stan 80-129 Type 2

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

# **Surface Preparation and Pretreatment**



Ensure surface is clean, dry and intact, using a high performance cleaner. DeSoto<sup>®</sup> CN20 or Desoclean<sup>™</sup> 45 solvent cleaners are recommended.

## **Instructions for Use**



Thoroughly stir base to ensure all components are adequately dispersed prior to application. Add required volume of thinner & stir thoroughly. The amount of thinner may be varied to suit local conditions and equipment.

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:**

Not applicable

Viscosity: (23°C/73°F)

AFNOR4
 BSB4
 DIN 4
 FORD4
 50 - 55 seconds
 52 - 58 seconds
 42 seconds
 45 - 50 seconds

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



#### Pot Life:

Not applicable

# **Application Guidelines**

#### **Recommended Application Conditions:**

Temperature 10 - 35°C (50 - 95°F)

Relative Humidity 20 - 85%

#### Application:

Apply 2 cross coats to achieve the recommended dry film thickness of 25 - 35  $\mu$ m (1.0-1.4 mil) allowing a minimum of 15 minutes between coats.



Theoretical Coverage: (ready for use per coat)

10 m<sup>2</sup>/Lt @ 30 g/m<sup>2</sup> dry film thickness 400 ft<sup>2</sup>/US gal @ 1.2 mil dry film thickness

#### **Recommended Dry Film Thickness:**

25 - 35 μm 1.0 - 1.4 mil



#### **Dry Film Density:**

1.13 g/cm<sup>3</sup> 9.42 lbs/US gal

#### **Recommended Dry Film Weight:**

34 g/m $^2$  @ 30 µm dry film thickness 0.006 lbs/ft $^2$  @ 1.2 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:**

Equipment Type	Tip Size	Pressure
High Pressure Spray	1.2 to 1.5 mm	43 to 72 psi
		(3 to 5 bar)



N39/1794 can also be applied by brush (no thinner required).

#### **Equipment Cleaning:**

Clean spray equipment before use and as soon as possible afteruse. Desoto ® CN20 or Desoclean 45 ™ solvent cleaners are recommended.

# **Physical Properties**



#### Colour:

Colourless



#### Gloss:

> 85° units with a 60° gloss meter



Drying Times 50% R.H.	23°C (73°F)
Dust Free	15 minutes
Recoat with Self	15 minutes
Touch Dry	30 minutes
Dry to Tape	2 hours
Full Cure	7 days

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



#### Flash Off Time:

Not applicable



VOC: (ASTM)

N39/1794 620 g/Lt N38/4056 (0920/9000) 830 g/Lt



#### Flash Point:

N39/1794 27°C (81°F) N38/4056 (0920/9000) 2.5°C (36.5°F)

#### **Shelf Life:**

N39/1794 24 months in original unopened container N38/4056 (0920/9000) 10 years in original unopened container

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

<u>Note:</u> 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.

## **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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1 (818) 362-6711 or 1-800-AEROMIX

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