

# DeSoto® 529K002 High Temperature Epoxy Topcoat

## TECHNICAL DATA SHEET

### Product Description

DeSoto® 529K002 high temperature epoxy topcoat can withstand an operating temperature of up to 204°C (400°F). It is used over high temperature coatings such as 519X303 and 825-009.

- Excellent adhesion to high temperature epoxy and polyurethane primers
- Excellent fluid resistance
- Excellent appearance
- Service temperature -54°C to 204°C (-65°F to 400°F)

### Components



#### Mix ratio (by volume):

- 529K002 (base component) 1 part
- 910K021 (activator component) 1 part

### Specifications



529K002 topcoat is qualified to:

- AIMS 04-04-21
- BAC 5710 Type 53
- CPW 269
- EMS 93284 Class A Grade 1
- HS 4675 Type VI
- PWA 569

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

#### Product Compatibility:

529K002 topcoat can be used over the following primer specifications:

- 299-947-167
- 642AS0844
- AIMS 04-04-021
- BAC 5710 Type 51
- CPW 268
- CPW 269
- EMS 93284
- HS 14569
- HS 4675
- KMB-YW0002
- MEP 10-090
- MM1256
- MMS 425 Revision B
- MMS 436
- PAI 3751-21-1
- PAI 3751-21-2
- PCS5409
- PS 13375
- PWA 568
- PWA 569

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## Surface Preparation and Pretreatments



529K002 topcoat can be applied over clean, dry, intact high temperature epoxy and urethane primers.

## Instructions for Use



### Mixing Instructions:

Prior to mixing, thoroughly shake the base component. Add the activator component to the base component and stir well. Maintain constant agitation for 10 minutes to ensure proper mixing.

*Note: It is important to condition the paint for 24 hours prior to mixing by placing all materials in the shop or hangar, with ambient temperatures between 13° and 35°C (55° to 95°F). The minimum temperature of the paint components should be 13°C (55°F) prior to mixing.*



### Induction Time:

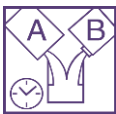
Not Required



### Viscosity: (23°C/73°F)

- |                         |                  |
|-------------------------|------------------|
| • #2 Signature Zahn cup | 15 to 22 seconds |
| • #4 Ford cup           | 10 to 17 seconds |
| • ISO 3mm cup           | 35 to 64 seconds |
| • ISO 4mm cup           | 17 to 30 seconds |
| • BSB3 cup              | 24 to 34 seconds |
| • BSB4 cup              | 16 to 20 seconds |
| • AFNOR #2.5 cup        | 41 to 66 seconds |
| • AFNOR #4 cup          | 14 to 18 seconds |

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



### Pot Life:

8 hours @ 21 - 25°C (70 - 77°F)

## Application Guidelines

### Recommended Application conditions:

Temperature	15 - 30°C (59 - 86°F)
Relative Humidity	20 - 90%

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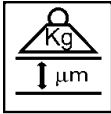
Ground the aircraft and the application equipment before topcoating. Stir the topcoat slowly during the application. The suggested film thickness is 25 to 50 microns (1.0 to 2.0 mils). This can be accomplished by one or two medium coats with a 50% overlap. Note the first coat should be allowed to tack up before applying the second coat. If the second is applied before the first coat has tacked up, sagging may occur.

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



## Theoretical Coverage:

8.5 square meters/liter at 25 microns dry film (350 square feet/gallon at 1 mil dry film)  
Recommended dry film thickness; 25 to 50 microns (1.0 to 2.0 mils)



## Dry Film Density:

1.24 grams/cubic centimeter (10.33 pounds/gallon)

## Dry Film Weight:

31 grams/square meter at 25 microns dry film (0.0063 pounds/square feet at 1 mil dry film)



## Equipment:

529K002 primer is compatible with all non-electrostatic spray equipment.

Equipment Type	Tip Size	Pot Pressure	Atomization Pressure at the Cap
High Volume Low Pressure Spray Gun (HVLP)	1.0 mm to 1.4 mm	10 to 20 psi (0.69 to 1.4 bar)	10 psi maximum (0.69 bar)
Conventional Air Spray Gun	1.2 mm to 1.8 mm	10 to 20 psi (0.69 to 1.4 bar)	45 to 60 psi (3.1 to 4.1 bar)

## Equipment Cleaning:

Clean spray equipment as soon as possible after use. Flush spray equipment with DeSoto® CN20, DeSoto® CN44, or Desoclean™ 45 high performance solvent cleaner.



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## Physical Properties (product)



**Color:** Aluminized



**Gloss:** 60+ G.U at 60°



<b>Dry Times</b>	<b>13 - 21°C (55 - 70°F)</b>	<b>22 - 28°C (71 - 84°F)</b>	<b>&gt;29°C (&gt;85°F)</b>
Dry Between Coats	45 minutes	30 minutes	20 minutes
Dry to Stack	5 hours	4 hours	3 hours
Dry to Overcoat	8 - 24 hours	6 - 24 hours	4 - 24 hours
Full Cure	14 days	14 days	14 days

Accelerated cure to dry hard:

Allow 30 minutes flash off at 24°C ± 3°C (75°F ± 10°F)  
followed by 90 - 120 minutes at 121°C (250°F)



**VOC:**

Mixed, ready for use VOC (EPA method 24)	667 grams/liter
Base Component	525 grams/liter
Activator Component	807 grams/liter



**Flash point closed cup:**

Base component	-5°C (23°F)
Activator Component	7°C (45°F)

**Shelf Life:**

12 months from date of manufacture to most OEM material specifications. Consult the specification to verify shelf life requirements.

24 months from date of manufacture for PRC-DeSoto Standard.

*Note: Shelf life is provided for original, unopened containers.*



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*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](http://www.ppgaerospace.com)**

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

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