# P-2009

# **Anti-Erosion Polyurethane Coating**



**Product** P-2009 Anti-Erosion Polyurethane Coating

Item Class Specialty Coating

P-2009 is a polyurethane based rain erosion coating formulated for use on exterior

aircraft and missile plastic parts.

**Specifications** Product is manufactured to meet the performance requirements of the following specifications:

32005 - AMS-C-83231

Catalyst & Additives Catalyst/Activator Additive

759 PS40 Accelerator

Use of Primers Please contact your local 3Chem representative for a complete list of epoxy primers

which may be utilized with this system.

**Surface Preparation** Prepare substrate per OEM requirements. Refer to product application guide for

detailed instructions or contact your local 3Chem representative for assistance.

 Mixing Instructions
 Base
 Catalyst/Activator
 Mix Ratio

 P-2009
 759
 1:1

Shake (Base) for 15 minutes to assure no solid settlement remains in can. Add component B catalyst to component A paint first. Mix ratio for material is 1-part component A paint, 1-part component B catalyst. No thinner should be added. (Kit yield either 2 gallons or 2 quarts). Must ensure mix ratio is exact to obtain desired flat finish.

Induction Time Although no induction time is needed. Once mixed together, insure that admixed

material is continuously stirred for at least 5 minutes before proceeding.

Spraying Viscosity 19-22 Seconds with #2 Zahn cup

**Pot Life** 7 Hours @ 21° Celsius, 70° Fahrenheit

Film Thickness 2-3 Mils DFT (2 Coats @ 1-1.5 DFT) Wet film thickness should be 4-6 Mils total between 2 coats

**Application Instructions** 

Temperature and Humidity	Minimum	Maximum
Temperature Celsius	11°	35°
Temperature Fahrenheit	52°	95°
Humidity	33%	74%

### **Anti-Erosion Polyurethane Coating**



### **Application Instructions**

#### **Spray Equipment**

Spray Gun Type	Tip/Nozzle Size	Cap Pressure	Pot Pressure
Conventional Air	1.3 - 1.6 mm	40 to 60 psi	10 to 20 psi
HVLP	1.4 - 1.6mm	10 psi Maximum	10 to 20 psi
Electrostatic	1.2 - 1.5mm	45 to 60 psi	10 to 40 psi

Temperature	Wet-Edge	Time Between Coats	Dry to Tape	Dry to Handle	Full Cure
52-65°F (11-18°C)	40 Min	30-50 Min	5-6 Hours	7-8 Hours	6 Days
66-85°F (19-29°C)	35 Min	30-45 Min	5-6 Hours	7-8 Hours	6 Days
86-95°F (30-35°C)	30 Min	30-40 Min	6-7 Hours	7-8 Hours	6 Days

Apply one even wet coat of material using a uniform spray pattern. Cross coat may be used to achieve 100% coverage in one single coat depending on color. Note: Apply only one coat of material to achieve proper gloss requirement of product.

### Application Instructions PS40 Accelerator (Fast dry additive mix options)

PS40 Accelerator	Dry Between Coats	Dry to Handle	Dry Hard	Pot Life	Full Cure
2% By Volume	12 Minutes	2 Hours	4 Hours	4 Hours	6 Days
3% By Volume	10 Minutes	1.5 Hours	3 Hours	3 Hours	6 Days
5% By Volume	5 Minutes	45 Minutes	1 Hour	45 Minutes	6 Days

<sup>\*</sup>Note: Over use of PS40 additive may affect product gloss and finish

Theoretical Coverage 800-900 sq. ft / gallon @ 1 mil 20-22m2 / liter @1 mil

\*Coverage based on 100% transfer efficiency rate

**Color** Flat White

Gloss Less than 10 @ 60 degrees

**Volatile Organic Compound** 300 – 390 g/l

**Shelf Life** 24 Months (When stored in climate-controlled environment between 60-80° F)

\*Product may be re-certified upon inspection by 3Chem.

Safety Instructions Always read material safety data sheet (SDS) and product label before utilizing

this product. Product SDS is available upon request.

#### 3Chem Corporation Disclaimer

All information, recommendations, statements, and technical data contained herein are not intended to be comprehensive or exhaustive, but instead are based on tests utilizing present knowledge and current laws. The accuracy and completeness of said tests are in no way guaranteed, nor should they be construed as an express or implied warranty. We believe such information, recommendations, statements, and technical data to be reliable and accurate, but we have no control over the quality or the condition of the many factors affecting the use and application of the product. The user shall depend upon its/his/her own information, data and testing to determine whether the product is suitable for the user's intended use and the user assumes all risks and liability resulting from its/his/her use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller. All products supplied, and technical advice given is subject to our standard terms and conditions of sale. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

\*Brand names mentioned above are either trademarks of or licensed to 3Chem Corporation.

2

# PRODUCT TECHNICAL DATA SHEET