



Product	35476 BOND PE/UM DARK BROWN 549
Curing	10 MINS @ 200C Metal Temperature
Brilliance	Visual Only
Approvals	Certificate Nos: 129c, 129f, 152f,152h,152j,152k,152n,280c.

**PRODUCT DESCRIPTION**

Sherwin-Williams' Powder Coatings' GSB Standard Class approved range of Architectural Polyesters are recommended for use on aluminium exterior situations where the GSB specification applies. Our attention to formulation and particle size control ensures optimum transfer efficiency, enabling applied costs to be better controlled.

**Storage Life:**

Store in dry, cool conditions, preferably below 25°C.

Shelf life under these conditions will be approx 12 months.

**CHARACTERISTICS**

**Spec. Gravity (kg/l):** 1,40 – 1,80 (depending on color and gloss)

**Theoretical Coverage (m<sup>2</sup>/Kg @60µ):** 9-12 (100% utilization assumed) depending on color and gloss

**Recommended minimum film thickness:**

Dry: 60 µm

**Colour:**

Wide range available to all common standards and to order

**Gloss:**

Three levels available (all measured at an incident angle of 60°)

Cert 129c	30 ± 5 units
Cert 129f	70 ± 5 units
Cert 152n	8+/-10 units

(permissible variation from the nominal value)

**APPLICATION**

Sherwin-Williams' GSB approved powder coatings are suitable for use with all known electrostatic powder spraying equipment designed for thermosetting powder application.

**Curing Cycle**

**Minimum Curing Conditions (Minutes at object temperature)**

	Semi Gloss 129f	Matt 129c
210°C	5 mins	8 mins
200°C	6 mins	10 mins
180°C	10 mins	Not recommended
170°C	16 mins	Not recommended

	Ultra Matt 152n
200°C	10 mins
195°C	12 mins
190°C	20 mins

**Maximum Cure Conditions**

	Semi Gloss 129f	Matt 129c
210°C	5-15 mins	8-15 mins
200°C	6-16 mins	10-20 mins
180°C	10-20 mins	Not recommended
170°C	16-25 mins	Not recommended

	Ultra Matt 152n
200°C	10-15 mins
195°C	12-25 mins
190°C	20-30 mins

## SUBSTRATE PREPARATION

Conversion coating is essential in all cases. A chromate or chromate-free pretreatment approved by GSB should be used prior to powder coating.

## PERFORMANCE DATA

### **Adhesion:**

Gt 0  
ISO2409:1992 (2mm)

### **Indentation**

Min 80  
ISO2815:1973

### **Mandrel bend:**

No cracking or detachment  
ISO1519:1995 (5mm)

### **Impact:**

No cracking or detachment  
ASTM D2794: 1969 (2.5Nm)

### **Kesternich**

Max 1mm corrosion creep from scribes  
ISO3231:1993 (0.21.S02-24 cycles)

### **Acetic Acid Salt Spray**

Max 16mm<sup>2</sup> over 10cm length of scribe  
ISO9227:1990 (1000hrs)

### **Accelerated Weathering**

Loss of gloss max 50% of original value  
QUV-B 313 300hrs

### **Weathering**

Residual gloss 50% of original (min)  
Florida 5° south facing 1 year  
(ISO2810:1974)

### **Resistance to Mortar**

No residue after removal  
ASTM B3260 (24hrs)

### **Resistance to boiling water**

No defects or detachment  
2 hrs de-ionised water or 1 hr pressure cooker

### **Condensed water**

No blistering  
Max 1mm under film creep  
DIN50017:1982 (1000 hrs)

### **Solvent (Xylene)**

Rating 3-4  
30 secs

### **Sawing, Milling, Drilling**

No cracking or chipping

### **Cupping Test**

(typically 7-9 min)  
ISO1 520: 1995 5 mm min

Substrate used for these tests was aluminum alloy AA5005-H24 with a thickness of 0.8mm pre-treated according to DIN 50939: 1988

## CAUTION

### **FOR INDUSTRIAL SHOP APPLICATION**

Thoroughly review product label and Safety Data Sheet (SDS) prior to using this product.

A Safety Data Sheet is available from your local Sherwin-Williams facility or distributor

**Note:** Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the user obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in user handling and methods of application which are not known or under our control, The Sherwin-Williams Company cannot make any warranties as to the end result.

Printed Date: Aug-22

### 35476 - BOND PE/UM DARK BROWN 549

Attributes	
Chemical Type	Polyester
Specific Gravity (Theoretical) (kg/l)	1.20 +/-0.10
Coverage @ 1 µm DFT m <sup>2</sup> /kg	
Technical Features	
Film Properties	Range/Value
Recommended Film Thickness	60-80 microns
Flexibility (Cylindrical Mandrel)	
Flexibility (Conical Mandrel)	
Adhesion	
Gloss (60 degrees)	Visual Only
Gloss (20 degrees)	
Direct Impact (cm/kg)	
Reverse Impact (cm/kg)	
Erichsen Cupping Test (mm)	
Cure Cycle	10 MINS @ 200C Metal Temperature
Appearance	
Application	Suitable for automatic and manual electrostatic application. Please check with your sales representative for Tribo.
Pretreatment	The surface to be coated must be free from oils, grease, and flash rust. A good quality pre-treatment process is recommended for optimum performance.
Substrate	Suitable for metal substrate.
Approval	
Version	

**Thoroughly review product label and Safety Data Sheet (SDS) for safety information and cautions prior to using this product.**

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Internal Use-IU-COR-00047