



Product	31304 BOND PE/UM LIGHT GREY C31
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 (m²/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 16mm² 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.

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Attributes	
Chemical Type	Polyester
Specific Gravity (Theoretical) (kg/l)	1.35 +/-0.10
Coverage @ 1 µm DFT m ² /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