

Product Code	VNL1E0004
Product Name	BOND PE/UM MIC RED PLUS
Group	765 – Polyester Ultra Matt
Curing	20-30'@190 °C   10-20' @200 °C
Surface	Dead matt smooth
Gloss	4-9 @60°
Approvals	Qualicoat Class 2: P-2144 (Minerbio) GSB: Florida 3 Master (152 n)

**PRODUCT DESCRIPTION**

Formulated on superdurable resins, the PE/UM range was designed to enhance the protection of aluminium components used in architecture and for coating galvanised steel.

Approved to GSB Master Quality specification and Qualicoat Class 2 category 1.

It can be used on all common metallic substrates, steel, and is suitable for outdoor applications.

**Storage Life:**

Store at temperatures lower than 30 °C.

Storage life in original package: 12 months.

**CHARACTERISTICS**

**Spec. Gravity (kg/L):**

1,18-1,28

**Recommended film thickness:**

60-80 µm

**Reaction to Fire EN 13501-1**

Classification: A2-s1, d0

**APPLICATION**

Suitable for automatic and manual electrostatic application.

Please contact your Sherwin-Williams representative to discuss tribo-static application.

The recycling of the powder is possible up to 30 % for solid colours.

For special finishes including metallic and speckled effects, the recycling is not recommended and a single batch of powder coating should be used to coat parts that will be subsequently assembled together.

**Curing Cycle**

Time	Substrate temperature
20-30 min	190 °C
10-20 min	200 °C

**SUBSTRATE PREPARATION**

The surface treatment should be chosen according to the type of substrate and the required performance.

The surface to be coated must be free from oxidation, oil, grease, or any other form of contamination.

A good quality pretreatment process is recommended for optimum performance.

The final user should select the proper pretreatment based on corrosion resistance performance.

Where required, the corrosion resistance can be enhanced using a primer system.

**CAUTION**

**FOR INDUSTRIAL SHOP APPLICATION**

Thoroughly review the product label and Safety Data Sheet (SDS) before 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 that are not known or under our control, the Sherwin-Williams Company cannot make any warranties as to the end result.

**PERFORMANCE DATA**

**Test conditions**

**Curing:** 20 min 190 °C

**Substrate:** 0,8 mm AA5005 (AQT-36)

**Film thickness:** 60-80 µm

<b>Adhesion</b>	GT0
<b>ISO 2409</b>	
<b>Buchholz Hardness</b>	> 80
<b>ISO 2815</b>	
<b>Erichsen Cupping</b>	> 5 mm (No sign of detachment)
<b>ISO 1520</b>	
<b>Impact Resistance</b>	> 25 Nm (No sign of detachment)
<b>ISO 6272-2</b>	
<b>Cylindrical Mandrel Bending</b>	5 mm (No sign of detachment)
<b>ISO 1519</b>	
<b>Resistance to Humidity</b>	24 cycles No infiltration greater than 1mm on either side of the cross, no change in colour, no blistering greater than (S2) according to ISO 4628-2
<b>ISO 22479</b>	
<b>Acetic Salt Spray</b>	1 000 hours No blistering greater than (S2) according to ISO 4628-2. Maximum 16 mm <sup>2</sup> infiltration over a scratch length of 10 cm
<b>ISO 9227</b>	
<b>Mortar Resistance</b>	according to Qualicoat requirements
<b>EN 12206-1 by 5.9</b>	
<b>Crosscut adhesion</b>	No sign of detachment
<b>ISO 2409</b>	
<b>Humidity Chamber</b>	1000 hours, no blistering greater than (S2) according to ISO 4628-2
<b>ISO 6270</b>	
<b>Test Water Spot</b>	(Qualicoat specific test) DL < 4
<b>Test Martindale</b>	Residual Gloss > 30 %
<b>CEN/TS 16611</b>	
<b>Accelerated Weathering</b>	1000 hours Gloss retention > 90 % Colour change not greater than 50% of the limits prescribed by Qualicoat
<b>ISO 16474-2</b>	
<b>Florida Weathering</b>	3-years exposure Gloss retention > 50 %
<b>ISO 2810</b>	Colour change shall not exceed, the maximum values stipulated in Qualicoat A12