SHERWIN-WILLIAMS
General Industrial Coatings

BOND PE/UM MIC

BOND PE/UM MIC series 765

Group	765 – Polyester Ultra Matt Mic
Curing	min: 190°C @ 20' to 30' | max: 200°C @ 10' to 15'
Surface	Dead matt smooth metallic finish
Brilliance	2 - 8 @ 60°C
Approvals	Qualicoat Class 2 n° P-1718 / GSB Florida 3 Quality (152 n)

PRODUCT DESCRIPTION

PE/UM is a superdurable thermosetting polyester powder coating delivering superior resistance to UV radiation and outdoor weathering and is certified by Qualicoat Class 2, Cat 1 (P-1718) and GSB Master (152 n) quality standards.

PE/UM was created to protect and decorate aluminium and galvansied steel components used in fenestration projects in high UV/tropical climates.

The unique matt appearance of PE/UM MIC both enhances the appearance of buidings and reduces glare in service.

The metallic effect is created with an in-house bonding to optimise application and colour consistency.

Storage Life:

Store at temperatures lower than 30°C. Storage life in original package: 12 months.

CHARACTERISTICS

Spec. Gravity (Kg/l): 1,25 - 1,40
Theoretical Coverage (m2/Kg @70µm): 9 - 12

Recommended film thickness:

- 70 -90 microns

Reaction to Fire EN 13501-1

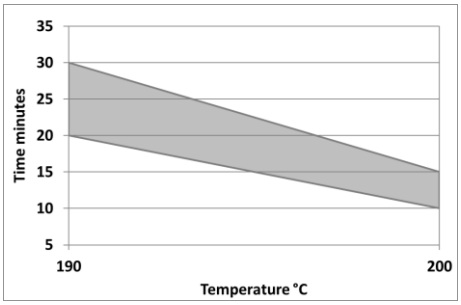
- Classification: A2-s1, d0

APPLICATION

Suitable for automatic and manual electrostatic application
Please contact your Sherwin-Williams representative to discuss tribo-static application

Curing Cycle

Time	Substrate temperature
10 - 15 min	200°C
20 - 30 min	190°C



CHEMICAL RESISTANCE

Immersion testing for 48 hours at ambient temperature:

Chemical	Effect
hydrochloric acid 10 %	No change
Nitric acid 30 %	matt, but washing off
Sulphuric acid 10%	No change
hydrogen peroxide 40 vv	No change
ammonium hydroxide 10%	No change
ammonium hydroxide 33 %	No change
sodium hydroxide 5%	No change
tartaric acid 5%	No change
citric acid 5%	No change
lactic acid 5%	No change
ethanol	No change
N-butanol	No change
petroleum ether	slightly softened

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, certified products can be found via Qualicoat, GSB or Qualisteelcoat.

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

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

		Substrate			
Pretreatment		Aluminum	Steel	Galvanized Steel	Metallized Steel
Chemical	Cr-free (Zr, Ti, Oxilanes or alternatives)	✓		✓	
	Pre-anodising	✓			
	Chromate	✓		✓	
	Phospho-chromate	✓			
	Iron phosphate		✓		
	Zinc phosphate		✓	✓	
	Nano-ceramic		✓		
Mechanical	Sand blasting		✓		
	Soft blasting			✓	✓
	Sweeping			✓	✓

PERFORMANCE DATA

Aluminium test panel (ALQ-36), DFT 70 microns, cured 20 minutes at 190°C satisfied the following requirements:

Gloss 60° :
2.0 - 8.0, UNI EN ISO 2813:2014

Buchholz indentation test :
more than 90, UNI EN ISO 2815

Erichsen cupping test (mm):
more than 5, UNI EN ISO 1520

Direct impact test (cm.Kg):
more than 25, ASTM D 2794; ISO 6272-2:2002

Reverse impact test (cm.kg):
more than 25, ASTM D 2794; ISO 6272-2:2002

Cylindrical mandrel size 4 :
does not break, UNI EN ISO 1519

Crosscut adhesion (2mm):
Class 0, UNI EN ISO 2409

Acetic salt spray test :
according toQualicoat and GSB International Requirements
UNI ISO 9227

Resistance to humidity :
(Humidity test) 1000 hours later – no blistering,
indentation along the cross of maximum 1 mm
UNI EN ISO 6270-2:2005

Accelerated Weathering:
1000 hours ≥ 90% Gloss retention
ISO 16474-2

Natural Florida Weathering:
Minimum gloss retention,
75% following 1 year exposure
60% following 2 years exposure
50% following 3 years exposure

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.