



Group	512 – Polyurethane Semigloss and Polyurethane Matt
Curing	min: 190°C @ 14' to 20'   max: 200°C @ 10' to 15'
Surface	Smooth
Brilliance	5 - 75 (60°)
Approvals	

### PRODUCT DESCRIPTION

This Polyurethane based thermosetting powder coating forms a decorative film with enhanced outdoor resistance. The product forms a level hard film with good resistance to mechanical damage, and enhanced chemical resistance to detergents, fuels and oils.

The excellent levelling property of this product imparts a smooth, highly appealing finish to coated articles.

Can be used on all common metallic substrates, steel, aluminum, and galvanized steel, and is suitable for exterior applications.

#### Storage Life:

Store at temperatures lower than 30°C. Storage life in original package: 18 months.

### CHARACTERISTICS

**Spec. Gravity (kg/l):** 1,25 – 1,80

**Theoretical Coverage @60µm:**  
9 - 13 m<sup>2</sup>/kg

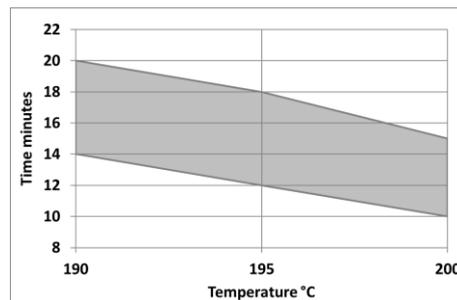
**Recommended film thickness:**  
Dry: 60 - 80 µm

### 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
12 - 18 min	195°C
14 - 20 min	190°C



### CHEMICAL RESISTANCE

Immersion method for 48 hours at ambient temperature into:

#### CHEMICAL

Hydrogen chloride 10%	intact
Nitric acid 30%	intact
Saturated hydrogen sulphide	intact
Hydrogen peroxide 40 volumes	intact
Ammonium hydroxide 10%	intact
Ammonium hydroxide 33%	intact
Sodium hydroxide 5%	intact
Tartaric acid 5%	intact
Citric acid 5%	intact
Lactic acid 5%	intact
Ethanol	intact
N-butanol	intact
Petroleum ether	slightly softened

#### RESULT

### 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.

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

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

Pretreatment	Substrate				
	Aluminum	Steel	Galvanized Steel	Metalized Steel	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**

A pre-treated steel test panel (UNI sheet), cured for 10 minutes at 200°C with DFT 60 microns, satisfied the following requirements,

**Gloss 60° :**

5 - 75

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

**Conical mandrel : Bend test**

Maximum 10 mm

**Crosscut adhesion (2mm) (GT):**

Class 0

UNI EN ISO 2409

**Salt spray test :**

1000 hours later – indentation along the cross of maximum 3 - 6 mm

**Resistance to humidity:**

(Humidity test) 500 hours

no change

UNI EN ISO 6270-2:2005

**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.