



Group	511 – Polyurethane Gloss		
Curing	min: 190°C @ 14' to 20'   max: 200°C @ 10' to 15'		
Surface	Smooth		
Brilliance	85 - 95 (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, aluminium and galvanised 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 (\kappa g/I):** 1,25 – 1,80

**DFT** (micron): 60 - 80

Theoretical Coverage @60um:

11.5m<sup>2</sup>/kg

**Recommended film thickness:** 

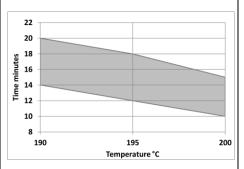
Dry: 60 -80 microns

# **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 ambienttemperature into:

CHEMICAL	<u>RESULT</u>
Hydrogen chloride 10%	intact
Nitric acid 30% mat	t, but washing off
Saturated hydrogen su	lphide 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

#### **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.

		Substrate			
Pretreatment		Aluminum	Steel	Galvanized Steel	Metallized Steel
Chemical	Cr-free (Zr, Ti, Oxilanes or alternatives)	<b>~</b>		✓	
	Pre-anodising	>			
	Chromate	<b>&gt;</b>		✓	
	Phospho- chromate	<b>✓</b>			
	Iron phosphate		1		
	Zinc phosphate		✓	✓	
	Nano-ceramic		✓		
Mechanical	Sand blasting		1		
	Soft blasting			✓	1
	Sweeping			✓	1





#### **PERFORMANCE DATA**

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

### **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 fog test:

1000 hours later – indentation along the cross of maximum 3 – 6 mm
UNI ISO 9227

### 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.

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