



## METGUARD T101 HIGH GLOSS AIR DRYING COATING PRODUCT AND APPLICATION DATA SHEET

### PRODUCT DESCRIPTION

Polymeric air drying coating which provides a high gloss, abrasion and chemical resistant, weatherable **top coat** over the base coat, METGUARD B101/B102/B103/401. This product provides excellent resistance to industrial pollutants both acidic and alkaline, humidity, thermal oxidation and UV. It is supplied as a two component system, PART A and PART B, in different industrial shades, and air dries at ambient conditions.

It is **totally eco-friendly as it is free of halogens, chromates, isocyanates and any other toxic ingredients. It is re-coatable even after many years of service.**

### APPLICATION AREAS

- New as well as **pre-erected rusted/corroded** steel structural members, used in bridges, marine superstructures, refineries and petrochemical sectors, other **industrial installations exposed to hostile polluting environments.**
- Railway tracks both existing as well as new.
- **Duplex coatings** on Metalized Steel such as Galvanized Steel
- Grills, Railings in Residential & Commercial Buildings
- To be used as top coat on base coat on rebars

*Note: **NOT** recommended for immersion conditions.*

### APPLICATION METHOD

- Base coat METGUARD B101/B102/B103/401 should be applied first on the substrate and air dried. For base coats of DFT equal to or more than 80 microns with METGUARD B101, allow 16-18 hrs interval before top coating.
- **PART A** and **PART B of METGUARD T101** should be mixed in the prescribed proportion specific to individual colour, and thinned only if necessary, with METGUARD Thinner T101.
- Mixing Ratio: Part A : Part B = 5:1 (by volume) for light shades;  
Part A: Part B = 4:1 (by volume) for dark shades
- Provide one hour of maturation time after mixing Parts A & B before application
- Allow for 2 to 3 hours minimum of air drying prior to second application of Top Coat if required.
- No special handling is required as the material is non toxic.
- Use in a well ventilated area as the product contains volatile organic solvents

## PROPERTIES

<b>PHYSICAL</b>	
Appearance	Free flowing liquid
Density	1.20±0.05 gms/cc
Volume Solids (v/v)	46 - 52 % (according to shade)
Theoretical coverage at 50 micron DFT	9.2 to 10.4 square meter/litre depending on shades
Color	Most light and dark industrial shades
Drying Time (at 27± 2°C & 50% RH)	Touch dry in one hour; hard dry in 8 hours
Pot Life (at 27± 2°C)	Min. 4 hours
Recoatibility	Perfect even after many years of service
<b>CHEMICAL</b>	
Chemical Resistance (ASTM D1308 – Spot test with exposure of 4 Hrs )	
50% H <sub>2</sub> SO <sub>4</sub>	No effect
30% HCl	No effect
20% CH <sub>3</sub> COOH	No effect
30% NH <sub>4</sub> OH	No effect
50% NaOH	No effect
<b>CORROSION</b>	
Salt Spray (ASTM B117)	More than 2000 hours ( <b>creep less than 1 mm from scribe</b> )
Electrochemical Impedance Studies	Coating maintains polarization resistance , Rp, in the range of Giga ohm cm <sup>2</sup> after 7700 hrs of 3.5% NaCl solution constant exposure
<b>MECHANICAL</b>	
Scratch Hardness (IS : 101 part 5/sec 2)	5 Kg load
Adhesion (ASTM D3359)	Classification 5B
<b>THERMAL</b>	
Dry Heat Resistance	Up to 200°C
<i>Note: All Chemical, Mechanical and Thermal tests were done on METGUARD T101 coated to a DFT of 80µ, on CRS pre-coated with METGUARD B101 (150µ DFT), and force dried at 70°C for one hour.</i>	

## STORAGE LIFE

Storage life of **METGUARD T101 comprising PART A and PART B**, is six months when stored in original containers at or below 40°C.

## PACKAGING

Available in 5 litre and 20 litre containers.

## LEGAL NOTE

The information and recommendations relating to the application and end use of above products, are given in good faith based on our current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with our recommendations.