



METGUARD 401 RAPID CURE PROTECTIVE COATING PRODUCT AND APPLICATION DATA SHEET

PRODUCT DESCRIPTION

Direct to metal rapid cure air drying polymeric coating to protect all new ferrous/non-ferrous structures from corrosion in coating thickness ranging from 40 to 80 microns. Application of this product requires minimal surface preparation on all substrates, eliminating blasting in all forms, and provides an eco-friendly and cost effective solution to corrosion protection in a variety of environments.

- **Eliminates sand/shot blasting, as coating can be applied on black fresh hot rolled steel, galvanized steel, aluminium, stainless steel, etc.**
- **Provides outstanding protection in thin films requiring no more than two coats**
- **Functions as a preservative coating requiring no removal, which later forms an integral part of complete scheme for long lasting protection**
- **Offers excellent combination of mechanical toughness, scratch hardness, chemical and corrosion resistance and thermal resistance**
- **Can be top coated with METGUARD T101/T102 to provide long lasting protection from all hostile environments**

The product is totally eco-friendly as it is free of iso-cyanates, halogens, lead, chromates, and any other toxic ingredients. It is supplied as a two component system.

APPLICATION AREAS

- All new structures including piping, vessels, columns, girders, etc, exposed to C3 environs
- Preservative coating for ferrous/non-ferrous rolling stock of structural members
- For extra protection against strong chemical attack METGUARD T102 / METGUARD T101 may be used as a top coat over METGUARD 401

Note: NOT recommended for immersion conditions.

APPLICATION METHOD

- Application requires ST1 preparation on new structures. If flash rust is present, it should be removed to the extent possible by wire brushing and coating DFT should be minimum 60 micron.
- Part A when stored for long at low temperatures, may have to be warmed to approximately 40°C and mechanically stirred to achieve proper fluidity and consistency.
- PART A of METGUARD 401 should be homogenized first and PARTS A and B should be mixed in the prescribed proportion and thinned as per requirement with METGUARD Thinner 401. Mechanical stirrer is recommended for homogenization and mixing.

PART A: PART B – 100:8 (by weight) ; 100:10 (by volume)

- The product may be applied by brush/spray/roller
- Provide interval of 2 hours minimum before re-coating. For top coat application, if necessary, allow 4 hours interval minimum
- Use in a well-ventilated area as the product contains volatile organic solvent.

PROPERTIES

PHYSICAL	
Appearance	Free flowing liquid
Volume Solids (v/v)	44%
Theoretical coverage at 50 micron DFT	8.8 square meter/litre
Gloss	Matt finish in industrial shades
Drying Time(at30°C;50%RH)	Touch dry in 1 hour; hard dry in 4 hours
Pot Life (at 27±2 °C)	8 hours
CHEMICAL	
Chemical Resistance (ASTM D1308 – Spot test of 4 Hrs)	
5% H ₂ SO ₄	Passes
5% HCl	Passes
5% CH ₃ COOH	Passes
5% sodium carbonate	Passes
Solvent Resistance	MEK double rub more than 50
CORROSION	
Salt Spray (ASTM B117)	More than 1000 hours (creep less than 1 mm from scribe)
MECHANICAL	
Adhesion (ASTM D3359) – Cross Hatch and 2 mm grid	Classification 5B
Scratch Hardness (IS 101 Part 5 Sec II)	Up to 2.5 Kg.
THERMAL	
Dry Heat Resistance	Upto 200°C
Flame Retardance	Intumescent
<i>Note: all properties obtained on black HRS coated to a DFT of 60 microns</i>	

STORAGE LIFE

Storage life of **METGUARD 401** is 6 months when stored in original sealed containers at or below 40°C.

PACKAGING

Available in 5 liter 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.