



METGUARD B103 AIR - DRYING COATING PRODUCT AND APPLICATION DATA SHEET

PRODUCT DESCRIPTION

Polymeric air-drying, chromate-free thin film **sealer cum primer coat**, specially formulated for protection of **non pre-treated** metalized steel and non-ferrous structures made of Galvanized Steel, Aluminized Steel, Galvalume, Aluminium alloys etc. The product is supplied as a two-component system, **PART A and PART B**, and air dries at ambient conditions upon application by brush or spray.

METGUARD B103 is a chromate free, halogen free, isocyanate free, non-toxic, environment friendly product. For aesthetics or complete protection of structures or parts exposed to aggressive environments, a top coat of **METGUARD T101/T102** is recommended over the sealer cum primer coat.

APPLICATION AREAS

- New as well as existing rusted roofing/cladding sheets, used in steel mills, galvanizing plants, chemical industries, sugar mills, paper and pulp industries, and many other industrial installations, exposed to hostile polluting environments acidic or alkaline in nature.
- Ordinary GC sheets protected by the complete coating scheme may replace colour coated galvanized/galvalume sheets in aggressive acidic/alkaline environment for much longer life.
- HDG structural members such as columns, beams, angles, channels, plates etc. used in highways, railways, power and telecom sectors and other infrastructure.
- For mildly acidic/alkaline environments, METGUARD B 103 alone is sufficient to protect galvanized roofing/cladding panel. However for strongly acidic/alkaline environs a top coat METGUARD T101/T102 is required.

Note: NOT recommended for immersion conditions.

SURFACE PREPARATION

No surface preparation other than removal of loose white rust by light wire brushing and solvent cleaning is required. Removal of existing paint if any is strongly recommended. ALL HAZARDOUS PRACTICES INCLUDING SWEEP BLASTING OR CHEMICAL PRE-TREATMENT ARE COMPLETELY ELIMINATED.

APPLICATION METHOD

- PART A of METGUARD B103 should be homogenized first and PARTS A and B should be mixed in the prescribed proportion and thinned as per requirement with METGUARD Thinner B103. Mechanical stirrer is recommended for homogenization and mixing.
 - **PART A: PART B – 100:8 (by weight) ; 100:10 (by volume)**
- Recommended coating thickness on metalized steel is 20 to 100 microns (μ) depending on environment and final coating scheme. The product may be thinned with recommended METGUARD thinner if required, and brushed or sprayed on the surface. Application of second coat of, if required, should be attempted 2 hour following the earlier coat.

For extremely aggressive environments, such as strong mineral acid fume exposure, a top coat of METGUARD T101/ T102 is suggested and should be applied at least 4 hours after METGUARD B103

PROPERTIES

| PHYSICAL | |
|---|--|
| Appearance | Free flowing liquid |
| Colour | Off White |
| Volume Solids (%v/v) | 46±1 |
| Theoretical Coverage (At 20µ) | 23 sq.m/litre |
| Drying Time(at30°C;50%RH) | Touch dry in 15minutes; hard dry in 2 hours |
| Pot Life(at27±2°C) | Min.8 hours |
| MECHANICAL | |
| Adhesion(ASTM D3359) | Classification 5B |
| Compatibility | Fully compatible with Top coat METGUARD® T101/T102 |
| Flexibility | 4T bend without cracking or disbondment |
| CORROSION | |
| Salt Spray ASTM B117 | 1000 hours (no white rust on galvanized steel; no creep from scribe) |
| THERMAL | |
| Dry Heat Resistance | Upto 200°C |
| Flame Retardance | Intumescent |
| <i>Note: Mechanical, corrosion, and thermal tests performed on non pre-treated galvanized steel coated to DFT of 40 µ of sealer coat and 40µ of topcoat METGUARD T101 and force dried at 70°C for one hour.</i> | |

STORAGE LIFE

Shelf life of **METGUARD B103**, comprising **PART A and PART B**, is six months when stored in original sealed 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.