

# HIGHGUARD-2053

Glass Flake Based Surface Tolerance Epoxy Phenolic Coating



## PRODUCT DESCRIPTION

HighGuard-2053 is two Component High Chemical & Corrosion resistance Glass flake-based Surface Tolerance Epoxy Phenolic coating. HighGuard-2053 unique technologies formula has been designed to withstand the harshest of environments, from costal condition to acid rain and has pass 2000 hours salt spray test as per ASTM B117. HighGuard-2053 encapsulates existing rust and prevents it from corroding further. Only minimal surface preparation required; saving both time and labor substrates.

## BENEFITS

- Excellent chemical resistance
- Excellent Corrosion resistance
- Excellent Water resistance
- Excellent Abrasion Resistance
- Good Heat resistance up to 180 °C
- High mechanical strength
- Easy & fast application
- Durability
- Seamless
- Aesthetic: Available in several colors
- Provides a hygienic surface since easy to clean

## USES

- Chemical Industries

- Pharmaceutical Industries
- Lining of waste water foulds & Tanks
- Tank & Vessel Coating
- Acid & Chemical Storage Tank
- Food Processing Plants
- Offshore Structure
- Laboratories
- Pipe line Coating
- Heavy Duty Marine Application
- Factory shop floors
- Acid Sumps & Drains
- Tank farm dyke wall

#### REQUIREMENT

- **Application Method:** Brush /Roller/ Airless Spray
- **Airless Spray:** Nozzle Size 0.28- 0.33 mm / Nozzle pressure 10-13 MPA

#### TECHNICAL DATA

PROPERTIES	RESULTS
Chemical Base	Aromatic Amine Based Epoxy Phenolic Coating
Color	Grey/Red oxide/ Customized
Surface Finish	Glossy
Mixing Ratio	2:1 / Volume
Pot Life at 30°C	25 Min @ 30°C
Volume Solid	94 ±3 %
Thickness	150-200 micron / Coat
Consumption	4.7- 6.26 Sq. mtr/ltr
Temperature Resistance	95°C Continuous & 180°C Non-Continuous
Recoating Interval	8 hrs.
Drying time @ 30°C	
Touch dry	4 Hours
Hard dry	16 Hours
Full Dry	7 Days
Water permeability	Impermeable
Abrasion Resistance	20 mg/1000 Cycles
Pull of Adhesion	>6 MPa
Compressive Strength	>80 MPa
Tensile Strength	>20 MPa
Salt Spray (ASTM B117)	>2000 Hour
Shelf Life	12 Months

#### STORAGE

HighGuard-2053 must be stored in accordance with national regulations. Storage conditions are to

keep the containers in a dry, cool, well-ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.

### **SURFACE PREPARATION**

All surfaces should be clean, dry and free from contamination like oil, grease, etc. which is to be removed by solvent cleaning. Steel Blast clean to SA 21/2, if impractical prepare surface using hand tools or power tools to achieve St3 grade of surface preparation.

### **MIXING**

Stir it thoroughly, if settling is observed. Mix part B in to part A under continuous stirring for homogenous mixing.

### **APPLICATION**

It is recommended to be done by Spray or Brush. Do not apply when temperature falls below 10°C above 50°C or when relative humidity rises above 85% or during rain, fog or mist.

### **CHEMICAL RESISTANCE**

Individual and separate total immersion tests indicate the following resistance properties for HighGuard-2053. Good work practice calls for spills to be removed quickly and the surface well rinsed with water.

REAGENT	RATING	REAGENT	RATING	REAGENT	RATING
5% Citric Acid	R	Acetone	GR	Beer	R
30% Citric Acid	R	Butanol	R	Wine	R
80% Citric Acid	R	Chloroform	LR	Whisky	R
5% Acetic Acid	R	Diethyl Ether	R	Carrot Juice	R
50% Acetic Acid	GR	Dimethyl Formaldehyde	LR	Vegetable Juice	R
30% lactic Acid	GR	Dimethyl Sulphate	R	Milk	GR
10% tartaric Acid	R	Ethyl Acetate	GR	5% Starch Solution	R
Pure Oleic Acid	R	Hexane	R	Salt water (Brine 20%)	R
50% Nitric Acid	R	Fuel Oil	R	10% Lechtin/Soya)	R
50% Phosphoric Acid	GR	Kerosene	R	Hydrogen peroxide	R
70% Sulphuric Acid	GR	Petrol	R	Caustic soda	R
98% Sulphuric Acid	GR	Methylated Spirit	R	Pool Chlorine	R
36% Hydrochloric Acid	R	Methylene Chloride	NR	20% Amm. Persulphate	R
50% Chromic Acid	R	Propanol	R	Ammonia	R
Hydro Fluoric Acid	NR	Tetrahydrofuran	LR	40 % Urea Solution	R
Xylene	R	Toluene	R		

**Note:** Cured for 28 days at 30°C Key:

R= Resistance greater than 6 months

GR= Good Resistance-Greater than 3 months and less than 6 months

MR= Moderate Resistance- Greater than 1 week and less than 3 months

SR= Some Resistance- Greater than 3 hours and less than 1 week

LR= Low Resistance- Less than 3 hours

NR= No Resistance- Softens Immediately

The above results are issued in good faith and are based on laboratory testing and are given as a guide to product performance. It is essential that the end users satisfy themselves as to the products performance under specific required conditions.

### **PACKAGING**

30 Kg Packing.

### **PRECAUTIONS**

Take care to avoid skin or eye contact and breathing vapors. In the event of the skin contact immediately wash thoroughly. In the event of eye contact, wash continuously for 15 minutes in water and seek medical advice. Wear protective clothing, gloves, and safety glasses while using this product. If inhalation occurs, move to fresh air and seek medical advice in case of difficulty in breathing. Keep material away from heat, flames, and sources of ignition.

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