# Technical Data Sheet



# Metal Shield

### (Solar Reflective & Anti Corrosive Coating)

"Surface Temperature Reduction upto 22\*C during peak Summer"

# Swish Coatings

#### **Description**

Metal Shield, an innovative Solar re-radiating compound, is formulated by us after thorough research and field testing. Metal Shield Coating acts as Solar Reflective as well as Water Proof layer. The active chemical components (including imported chemicals) in Metal Shield yield a flexible water proof coating and it minimizes the thermal conduction through it. Metal Shield coating acts like a shield to prevent Corrosion and Rusting and lasts long.

Metal Shield is a mixture of high grade acrylic resin and specially graded imported chemicals and Inhibitors and selected additives.

It dries by evaporation to yield a tough, flexible, non yellowing abrasion resistive and water proof surface. For metal sheets, Metal Shield can be directly applied without any primer coat (2 or 3 Coats) depending upon the requirements.

Metal Shield Coat is having highly Solar Reflective as well as Anti-Corrosive, Anti-Rusting, UV Resistive properties also. It can be applied on all Metal like G.I., Galvalum, Aluzine etc.

#### **Technical Information**

	Comp A (Powd	ler) Comp B (Ha	rdener)
Consistency	Powder	Liquid (Ha	nrdener) 100:35
Color	White	Transparen	nt -Milky
Density (g/cm	3)		1.04±0.2
Dry Solids Co	ontent (%) 100 >	62	
Mixing Ratio	Comp A(I	Powder) : Comp B(H	[ardener] =
Idle Application Ambient temp		р.	+ 20C to + 35C
Pot Life 3hours @ 30*C			
Drying Time to touch or apply Second Coat:			30minutes
		durir	ng Day time when exposed to Sun
Full Curing Time -72hours			
Performance	of cured coating		
Lead Free Coa	tings	( < 32mg/kg)	
Low VOC		( < 51g/Litre)	
(Volatile Orga	nic Compounds)		
SRI (Solar Ref	lective Index) -	High	
Light Reflectar	ice Value	High	
UV Resistant			Yes,
Weathering	A	fter 5 years(practical)	no cracking, chalking
			and discoloration
Algae & Fungu	ıs Resistant		Yes
Elongation			> 100%
Peeling Off		After 5 years(practical)	) Free from Peeling Off

#### Advantages

- \* Highly Solar Reflective & Anti-Corrosive Coating
- \* Reduces Surface Temperature upto 22\*C during Peak Summer and hence reduces Room Temperature substantially.
- \* Reduces the Working Hours of Air Conditioners & Similar equipment .
- \* Excellent Anti-Corrosive Coating.
- \* Excellent Anti- Rusting Coating
- \* High resistance to the effect of long-term weathering, durable in all climate conditions including UV attack
- \* High DPUR (Dust Pick Up Resistive)
- \* Excellent bond to all Metal Sheets'
- \* Suitability can be used for flat as well as sloping roofs
- \* Abrasion resistant Highly Abrasion Resistant. No additional protective coating is required for roof subjected to foot traffic
- \* Easy to Apply Can be applied by brush or Spray Gun easily
- \* Weight addition light in weight does not add extra weight over the roof
- \* Most Economical.
- \* Easy to re-coat existing surfaces coated earlier with Metal Shield

#### Uses

#### Metal Shield

- \* To reduce substantially the Heat entering the rooms through the sheets
- \* To Control Corrosion and Rusting and thus enhance the of the Sheets
- \* For Flat or Slope Roofs as well as Walls.
- \* For all types of Metal Sheets

<sup>\*</sup> Clearly Indicates results of tests conducted for Roof Shield, a variant of Metal Shield developed for Concrete Substrates.

Not for Metal Shield

# **Metal Shield**

#### **General Information**

Physical state / form.....Two Part (Powder+ Hardener)

Flammability of the Product: Non-flammable . Safe to Transport..:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known

#### **Packing**

4kg, 16kg (Powder + Hardener)

#### Shelf Life & Storage

Shelf life is 12 months from the date of manufacturing in unopened condition.

### **Surface Preparation:**

- . On Metal Sheets meant for Roofs and Walls (Metal), surface must be free from dust, loose material, paint, oil, or any material which may impair adhesion. Mechanical means such as emari paper can be used to make the surface a little rough. In order to obtain the protective properties of Metal Shield, it is important that the correct rates of application arc observed. The mixed material like any other paint may be applied with brush or Sprayer. The application of Metal Shield should better be done when the temperature of the substrate is below 30\*C.
- 2- 3 coats depending upon the requirements after proper mixing and dilution with water by brush at an interval of 2-3 hours between each coat Allow the coated surface to air cure for 3 days

### **Mixing Procedure for 4kg Packing**

Metal Shield -Powder should be emptied into a suitable container. Add portable water (about 750ml - 1litre for 4kg packing) Little more water may be added during application if the solution become thicker beyond brushable consistency due to higher atmospheric temp.) for 4kg packing (Powder + Hardener) and mix thoroughly with a mechanical mixer using a slow speed drill (500rpm) to form a paste form . The hardener component should be added gradually to the paste to avoid lump formation and mix for 2-4 minutes. Metal Shield should be used after mixing within 2 to 3hours. Do not mix more material than can be used within the pot life. Keep stirring Metal Shield solution during the application with brush or a rod. Do not over dilute the solution for ease of application.

#### Coverage

For Metal Shield you will get from 450-500sq.ft per 4kg packing -Single Coat.

#### **General Information**

#### Flamability of the product; Non-Flammable.

Physical state / form : Two Part (Powder+ Acrylic based Hardener)

Colour: White Odour: Slight

Stability and reactivity

Shelf Life: Shelf Life is 12months from the date of Manufacturing in

unopened condition store in a cool & dry place.

Manufactured By:

## **Swish** Coatings

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