# Silver Zinc Technical Data Sheet

#### Introduction

**Silver Zinc** is a fast drying, high solids, and high performance epoxy zinc rich coating designed to protect steel against corrosion and when exposed to severe corrosive environments, such as salt and water. SZ is ideal for all type of ferrous substrates.

The Silver Zinc impacts corrosion resistance via sacrificial protection. The product contains approximately 32% zinc in the dry film and at this level zinc to zinc contact is maintained and that the zinc is also in direct with iron. The essence of this configuration is that in the presence of moisture a galvanic cell is stimulated where zinc corrodes in preference to iron thus protecting iron from undergoing corrosion

The other advantage of Silver Zinc is that the by-products of corrosion of zinc are oxides namely zinc oxide, zinc carbonate and zinc sulphate all of which are inert compounds that become deposited on the upper surface of the coating thus protecting the underlying zinc from further corrosion

#### **Surface Preparation**

For the zinc to be direct contact with iron, the iron surface must be cleaned thoroughly and be free of any low surface tension modifiers such as dust ,wax,grease,oils and anti rust additives that applied to metal by steel manufactures to prevent corrosion. Remove all traces of rust by wire brushing or mechanical sander until sound metal surface is achieved. Wipe the surface clean with solvent and a rag to removes traces of iron filings that may have generated during sanding operation .Allow the surface to dry.

Do not use rust converter as the acid in the rust converter will react with the zinc dust rendering it inactive.

#### Adjust spray Pattern

The fan jet may be adjusted for horizontal or vertical spraying by lifting off the head (Actuator) and turning the yellow tip to vertical or horizontal position.

# **Spray Application**

Shake the can thoroughly for 2 minutes to ensure even distribution of components. Ensure ball is rattling freely. Shake occasionally during use. Hold the can approximately 30 cm from the surface. Depress valve head and spray With smooth even strokes horizontally then vertically. Apply several light coats rather Than one heavy coat.

#### **Drying and Recoating**

The Silver Zinc will dry to handle in 30 minutes and can be recoated after 1 hour. Allow longer drying during cold winter conditions. It is best to apply at temperatures in the range  $15.0-30.0~^{\circ}\text{C}$ . The Silver Zinc will fully cure within 14 days. Full cure may be achieved within 6 weeks and this is due to the time taken for zinc to react with the metal surface The Silver Zinc does not require a topcoat but can be over coated with acrylic or Epoxy paint.

#### Coverage

Approximately 1.3 square meters per can. Coverage is also dependant spraying technique

#### **Durability**

When applied at 35 microns dry film thickness the Silver Zinc will provide a minimum of 7 years of service on exterior exposure. Higher film thickness will Prolong longevity.

The Silver Zinc will whiten during the early stages of service and this is due to oxide formation on the surface which serves to protect the underlying coating. This whitening will intensify until 15 months of exposure then it will stabilize from further recoating at intervals will serve to repair damaged areas and prolong the coating's life

# Clean Up

After use turn the can upside down and spray until jet clears. Any overspray can easily be cleaned whilst wet with Mineral Turps or General Purpose Thinners

#### **Caution**

Highly flammable, <u>do not</u> use near fire or open flame. Do not incinerate or puncture This can even when empty. Keep in a cool place out of the sun. Do not Store above 50.0°C Keep spray away from eyes.

### Warning

Intentional misuse by deliberately concentrating or inhaling contents can be harmful or fatal.

### Keep out of reach of children.

If swallowed seek medical advice immediately or contact the

Poisons Information Centre on 13 11 26

Propellant: Hydrocarbon