

## PRODUCT DATA

**PRODUCT NAME : AK-516**

**PRODUCT DESCRIPTION:** Two component air drying Polyamide cured zinc rich Brominated Epoxy primer

**RECOMMENDED USE :** Recommended as a Fire and corrosion resistant primer for suitably cleaned MS,GI, Aluminium structures painting in Process industries like fertilizer plants, Refineries, Petrochemical complexes for protection of steel and structures from fire, acid fumes, alkali fumes and corrosion. The primer withstands high chemical resistance and it is recommended for highly saline atmospheres.

### PHYSICAL DATA

**COLOUR :** Grey / Red Oxide

**FINISH :** Matt

**SOLIDS BY VOLUME:** 65±3%

**THEORITICAL COVERAGE :** 4.5 sq mtr / ltr at recommended DFT of 75µ.

**FLASH POINT** Base: 23 degree C; Hardener: 23 degree C; Mixed: 23 degree C

### DRYING CHARACTERISTICS

Surface dry: 20-30 Minutes;

Hard dry: 24 Hours;

Full cure: 7 Days

(At 30 degree C and 60% Relative humidity)

### SHELF LIFE

Base: 9 months;

Hardener: 9 Months At 25 degree C

### APPLICATION DATA

**MIXING RATIO** Base: 3 Hardener :1

**MATURATION TIME :** 30 minutes

**POT LIFE** 6 hours at 30 degree C

**APPLICATION** By Brush / By Air spray / By Airless spray

**THINNER** AK-579

**RECOMMENDED DFT :** 75 µ per coat

**OVERCOATING INTERVAL** MIN: 8 hours; MAX: 24 hours  
If exceeds, the surface should be roughened by emery scuffing.

**COMPATIBILITY: Epoxy and polyurethane paints**

### **Resistance Guide**

**Fire** : Meets the requirements of BS-476 part 6 & 7, IS-163 and ASTM 1360 when coated with AK-537 and BS-476 part 8 when coated with AK-558.

### **Chemical Resistance**

**Exposure Splash and Spillages Mild Fumes/outdoor Resistance**

Acids Good

Alkalis Good

Solvents Very Good

Salt Very Good

Water Very Good

**Weatherability:** Very good with suitable top coat

**Flexibility:** Good

### **SURFACE PREPARATION**

Remove grease, oil and other contaminants preferably using Degreasing solvent. Blast clean to a minimum of Sa 2 1/2 Swedish Standard SIS 05 5900 with a surface profile not exceeding 65 microns.

If Blasting is not possible, make full use of mechanical devices along with manual chipping and wire brushing to remove loose rust and scale to St. 2 Swedish Standard SIS 05 5900. Excessive burnishing of steel is to be avoided. Thoroughly dust down all surfaces.

### **HEALTH & SAFETY**

All work involving the application and use of this product should be performed in compliance with all relevant National Health, Safety & Environmental standards and regulations. Prior to use, obtain, consult and follow the Material Safety Data Sheet for this product concerning health

and safety information. Read and follow all precautionary notices on the Material Safety Data Sheet and container labels. If you do not fully understand these warnings and instructions or if you can not strictly comply with them, do not use this product. Proper ventilation and protective measures must be provided during applying and drying to keep solvent vapor concentrations within safe limits and to protect against toxic or oxygen deficient hazards. Take precautions to avoid skin and eye contact (i.e. gloves, goggles, face masks, barrier creams etc.) Actual safety measures are dependant on application methods and work environment. This is a solvent based primer and care should be taken to avoid inhalation of spray mist or vapor as well as contact between the wet paint and exposed skin or eyes.

## **APPLICATION METHOD**

1. Stir the Base part thoroughly. Mix the base and hardener as per our recommended ratio of 3 : 1 by volume. Stir & mix thoroughly to attain homogeneity.
2. Add AK – 579 thinner into the mix, if required, depending on application method, and stir thoroughly for few minutes.
3. Allow the mixture to stand still (maturation) for about 10-15 minutes to initiate the reaction. Strain the paint through Nylon filter cloth of 400 mesh size and apply uniformly over the surface.
4. The temperature of the substrate should be minimum 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate.
5. Good ventilation is usually required in confined areas to ensure correct drying.
6. All equipments used for above should be properly cleaned.
7. Do not allow material to remain in hoses, gun or spray equipment.
8. Thoroughly flush all equipment with recommended thinner. Once units of paint have been mixed they should not be resealed. Clean all equipments immediately after use with recommended thinner. It is good working practice to periodically flush out

spray equipment during the course of the working day. Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including any delays. Do not exceed pot life limitations.

#### 9. All surplus

materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

In the event where welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation.

**Application:** By Brush/By Air Spray/By Airless Spray

For Brush application, a maximum of 5% thinner, if required, is to be added.

Apply uniformly in criss-cross

manner and ensure there are no misses. Use quality brushes for paint application.

**Recommended Thinner :** AK-579

**For Air spray application:** 10-15%

**For Airless spray application:** Max 5%

Nozzle Orifice: 1.2 - 1.4 mm for air spray and Nozzle Orifice: 0.28 mm for airless spray.

Nozzle Pressure: 40-70 p.s.i for air spray and Nozzle Pressure: 1400-1800 psi for airless spray.

#### **NOTES**

1. Do not apply paint when temperature falls below 10°C or rises above 50°C and when Relative Humidity is above 85%, Do not apply during rain, fog, or mist.
2. Brushes and spray equipment should be cleaned with recommended thinner otherwise equipment is liable to damage.
3. Volume Solids will vary depending on shades. Products with different volume solids are also available on request.

4. DFT variation can be obtained by change in application method/thinning ratio. Contact us for further assistance.

Individual component is required to be store in cool, dry and covered condition, away from heat and ignition.

### **DISCLAIMER**

The information contained within this data sheet is based on information believed to be reliable at the time of its preparation. The company will not be liable for loss or damage howsoever caused including liability for negligence which may be suffered by the user of the data contained herein. It is the users' responsibility to conduct all necessary tests to confirm the suitability of any product or system for their intended use. No Guarantee of results is implied since conditions of use are beyond our control.

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