

# Procedure

## Xylan 1424 treatment

### GENEREL

Final product quality and performance depends on careful substrate preparation.

Contaminated substrates may cause poor adhesion or defects in the final dry film. Each item to be coated must be free of all contaminants e.g. oil, grease, detergent, rust and blast media.

Substrate preparation should be based on the design requirements of the item.

Choice of preparation method depends of substrate and demands of the end result. The following are the recommended substrates and substrate preparation used with this coating.

#### **Substrates:**

Most common metals. Aluminium. Mild steel. Stainless steel. Some plated metals.

#### **Substrate preparation:**

Degrease. Zirconium phosphate, 0,01-0,05 g/m<sup>2</sup> or/and light grit blast. An Ra (mean roughness) of 2.5 ± 1.0 microns, measured using surface roughness measuring

equipment is recommended. Typically use 80 - 100 mesh (150 - 200 micron) iron free, aluminum oxide grit. Since the Ra value achieved depends on the actual substrate, initial trials are recommended to establish the optimum grit size and air pressure for each substrate type.

#### **Optional primer:**

A heavyweight zinc phosphate, >10 g/m<sup>2</sup>, is recommended on mild steel. None required but Xylar 1 / Xylar 2 may be used to improve overall performance. (not normally used)

## PREPARATION OF COATING MATERIAL

#### **Mixing prior to use:**

It is imperative that the material is adequately mixed before use. The material should be high speed / shear mixed before use to eliminate any settling. Avoid creating foam while mixing. Check that there is no sediment on the bottom of the container. This product is liable to "skin." Keep container tightly closed when not in use. If container needs to be open to the air ensure product is continuously, slowly mixed.

#### **Recommended application viscosity:**

40 - 45 seconds in a BS 4 viscosity cup. Optimum results are obtained when the material is at "room temperature" nominally 15 - 30°C.

#### **Viscosity adjustment:**

This material is generally suitable for application as supplied. If absolutely necessary adjust viscosity with Whitford solvent 54. Add thinner in 2% increments until the desired application characteristics are obtained. Take care not to add too much thinner as low viscosity may produce rapid settling, runs and sags or low film thicknesses.

## APPLICATION TECHNIQUE

#### **Application information/technique:**

Use a spray gun with a 071 (1.8 mm) fluid nozzle and a 66SD1 air cap.

The proper amount of coating should be achieved with two or three passes of the spray gun across the work piece. Apply the coating to a uniform, full wet appearance.

**Recommended Dry Film Thickness/coat:** 20 ± 5 microns.

**Number of coats recommended:** Normally 1 but it is possible to apply multiple coats. Flash dry between each coat.

**Clean-up solvent:** Water. MEK on dried residue.

## FLASH OFF AND CURE SCHEDULE

**Flash-off conditions:** 2 - 10 minutes reaching a Peak Metal Temperature of 80 - 90°C which reduces blistering / popping.

**CURING:** 10 minutes with peak metal temperature of 205-220 °C

## TYPICAL CURED FILM PROPERTIES

Evaluate the coating according to the following specifications:

**Dry film thickness (Whitford TM114A):** 20 ± 5 microns

**Cure Test (Whitford TM115A):** Slight discoloration on cloth is acceptable after 50 double rubs with MEK soaked cotton bud. No substrate exposure.

**Appearance (Whitford TM120A):** Smooth, uniform finish.

**Gloss - 60° meter (Whitford TM121A):** Low to medium.