



# TECHNICAL DATA SHEET

## TDS 173

### UNIDOX RED OXIDE METAL PRIMER

Description:

An alkyd-based primer containing corrosion inhibiting zinc phosphate and suitable for general use on steelwork. It dries to a matt finish and can be overcoated with conventional air drying, white spirit based, oxidisable systems but not with two-pack systems, chlorinated rubber or quick drying alkyd finishes.

Colours: Red Oxide

Drying Times @ 20°C:  
Surface Dry: 1-1.5 hours  
Hard Dry: 3-4 hours  
Overcoating: 16 hours

Covering Capacity:  
Theoretical: 14sq.m/l  
Practical: This will be less than the theoretical and will be dependent on the type of application.

Wet Film Thickness: 72-75 microns (2.8-3.0 mils)

Dry Film Thickness: 25 microns (1.0mils)

Solids by Volume: 35% BS. 3900 Part A10 1976 and ASTM D2697-73

Flash Point: 41°C (105°F)

Thinners: TH.1

PLEASE NOTE: The above figures are given as a guide only and may vary with temperature and method application.

Important: THIS PRIMER MUST NOT BE USED UNDER FIRE PROOFING VERMICULITE CEMENTS.

Application:

Airless or conventional spray:

Brushing may be used for small areas only. For airless spray we recommend 17 – 21mls. tip size and 1600 – 2100 lbs/sq. inch pressure at the gun nozzle.

For conventional spray the primer may be thinned with up to 10% TH.2 thinner. Care must be taken to ensure that all edges, corners, nuts and bolts are adequately coated. Application should be carried out when the ambient temperature is below 7°C (45°F) or where the steel temperature is less than 3°C above dew point.

Overcoating:

May be overcoated with any conventional air-drying, white spirit based, oxidisable systems but not with chlorinated rubber systems or quick drying alkyd systems.

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#### Surface Preparation:

Can be applied to a wire brushed substrate. However, for optimum results blast cleaning to SA 2.5 Swedish Standard (second quality BS4232) is recommended. The surface profile should not exceed 100 microns. Grease and oil on the steel should be removed by solvent (white spirit) prior to blast cleaning.

Where blast cleaning is to be carried out prior to fabrication and a prolonged interval between blasting and painting is envisaged then it is advisable to apply a pre-fabrication primer TDS 510 which will protect steel through fabrication processes. Special attention must be paid to edges, corners and weld areas. Weld should if necessary be ground flush and all slag and weld spatter removed.

Where blast cleaning is carried out after fabrication areas that will prove inaccessible should be blast cleaned and primed with TDS 510 prior to assembly. Where site welding is applicable such areas should be masked off. Alternatively the primer should be removed for a distance of 5cm. from the edge of primer. Welds may then require to be all slag and weld spatter removed and vacu blasted prior to renewal of primer.

#### Health & Safety Precautions

##### Toxicity:

The solvent vapour is not highly toxic but inhaling the concentrated vapour for any length of time can result in giddiness or nausea. The effects are temporary.

##### Fire Risk:

The solvent vapour can form an explosive mixture with air and no naked lights of any kind can be allowed in the vicinity.

**SMOKING MUST BE PROHIBITED**

The information contained herein together with the suggestions for use and application is to the best of our knowledge, true and reliable. Since conditions of application and use are beyond our control, no warranty is expressed or implied in respect of these recommendations or products. Users are recommended to carry out confirmatory tests to check the suitability of products for their specific use.