

## Technical Data Sheet

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Product name

# RAILTECT 2300 WB

RAIL COATINGS POLYURETHANE

(SAT 700 & 7000 RANGE)



## PRODUCT DESCRIPTION

Aqueous two pack polyurethane enamel.

## INTENDED USES

- For interior and exterior use.
- A durable finish for rolling stock.

## FEATURES AND BENEFITS

- Excellent resistance against weathering and marring.
- Has low odour during application.
- Easy incorporation of curing agent component.
- Good application properties.
- Stable pot life profile.
- Good solvent resistance.

## PRODUCT INFORMATION

Appearance	High gloss
Colours	Light grey (SAT 700), Graphite grey (SAT 701), Traffic white (SAT 709), NCS Red (SAT 715).
Tint base	Pastel (SAT 7001), Deep (SAT 7002) and Transparent (SAT 7003). Range of colours tinted via PLASCON INSPIRED colourants.
Volume Solids	± 33 - 43% (typical)
Recommended DFT	Min: 30µm, Max: 50µm
Recommended WFT	Min: 70µm, Max: 116µm
Theoretical spreading rate	10.8m <sup>2</sup> /L at 40µm DFT at stated volume solids
VOC	<70g/L



Viscosity 75 – 80KU (typical)  
Flash Point Non-Flammable

### APPLICATION DETAILS

Mixing Ratio 4 parts base(SAT 700 RANGE) to 1 part curing agent(KAT 700) by volume

Mixing Mix base thoroughly. Then mix components together by slowly adding the curing agent to the base component while stirring (at 1500 R.P.M) with mechanical stirrer. Continue stirring for 2 minutes after all the curing agent has been added. Allow 10 minutes induction period. Then thin with water to the recommended application viscosity.

Method Conventional and airless spray application.

Airless Spray: Suitable nozzle orifice: 11 Thou  
Nozzle pressure: 140 – 170 Bar  
Recommended viscosity: 38 -42secondsFord Cup No. 4

Conventional spray: Suitable nozzle orifice: 1.3 - 1,5 mm  
Nozzle pressure: 3 - 4 Bar  
Recommended viscosity: 30 -35 seconds

Application environment

Surface Temperature	Min*: 10°C	Max: 40°C
Ambient Temperature	Min*: 10°C	Max: 40°C
Relative Humidity	Min*: 10%	Max: 85%

\*Or 3°C min. above dew point

Thinning Water

Cleaning Water. Equipment can be cleaned with water immediately after use followed by a rinse with water miscible solvent. (e.g., Acetone, alcohol)

Drying Time

Touch dry	40min at 23°C
Overcoating (Min)	1h at 23°C
Overcoating (Max)	48h at 23°C
Dry to handle	3h at 23°C
Full Cure	7 Days

Pot Life 3h at 23°C



## STORAGE AND PACKAGING

Store away from direct sun, heat, open flames, sparks and severe cold.

Shelf Life: 24 months(base)  
24 months(curing agent)

Dual Packs: 5L unit: 4L in 5L container base  
1L in 1L container curing agent

## TINTBASES

- The tint base containers are underfilled to levels which are specific for the tint base to allow for a calculated volume of colourants to be added. The volume indicated on the container is only achieved after the addition of all prescribed colourants as per the formulation.
- The tint base and the colourants are unfinished intermediate products which are not recommended for use by themselves. A finished product is only produced once the prescribed quantities of colourants have been thoroughly mixed with the tint base.

## TINTING PROCEDURE

- Select the required colour and reference no. from suitable fan decks or colour cards and locate the applicable formulation from the tables.
- Certain colour choices may require more than two coats to achieve full obliteration, (see computer formulations for details in remark column prior to tinting).
- Select the required tint base and volume for tinting and set the tinting machine to deliver the correct amount of colourants as per formulation.
- Inject all required colourants, close container, and shake in mechanical shaker for 5 minutes.

## SURFACE PREPARATION

All surfaces must be clean, dry, and free from contamination.

### MILD STEEL

- Degrease with STEELTECT 7100 SB(GR 1) and rinse thoroughly with fresh water.
- To remove rust, mill scale and other contaminants abrasive blast clean to grade SA 2 ½ of the ISO 8501-1:2007 with a blast profile of 30 – 50 µm.
- Alternatively wire brush to Grade St 3 of the same standard. This is not as effective and may result in a shorter maintenance-free period.
- Prime with RAILTECT 1200 WB(SAT 514 or 248) or RAILTECT 1000 WB

### GALVANISED IRON

- Clean with STEELTECT 7100 WB(GIC 1) to obtain a water break-free surface and rinse with clean water.



- Prime with RAILTECT 1100 SB(SAT 356).

#### **ALUMINIUM, STAINLESS STEEL AND OTHER ALLOYS**

- Degrease with STEELTECT 7100 SB(GR 1) and rinse thoroughly with fresh water.
- Abrade surfaces with a scouring pad to remove oxidised layers and provide a key.
- Prime with RAILTECT 1100 SB(SAT 356).

#### **PREVIOUSLY PAINTED SURFACES (Fully cured and in good condition)**

- Sand to a matt finish to provide a key.

#### **APPLICATION INFORMATION**

- Discard any mixed material left over after pot life has expired.
- Low temperatures and high humidity retard drying.
- Must not be used at air / substrate temperatures below 13°C.
- 23°C recommended substrate & ambient temperature

#### **SAFETY PRECAUTIONS**

- Always keep paint out of reach of children.
- Ensure good ventilation during application and drying.
- If accidental contact with skin should occur, wash immediately with soap and water or a recognised skin cleaner.
- Take care to avoid contact with the eyes. In case of contact, immediately rinse the eyes with plenty of water and seek medical attention.
- Harmful if swallowed. Seek medical attention and do not induce vomiting.
- Do not smoke while painting.
- Flammable. Store in a cool dry place away from heat and sparks.
- **Curing agent** contains isocyanate – use suitable respirator, particularly during spray application of the mixed material.
- Refer to Safety Data Sheet for complete information.

#### **DISCLAIMER**

The recommendations contained herein are given in good faith and are meant to guide the specifier or the user. They are based on results gained from our tests and experiences and are believed to be dependable. No guarantee is implied by the recommendations contained herein since conditions of use, method of application and cleanliness of the substrate prior to painting are beyond our control.



**NB:** Technology may change with time necessitating changes to this Technical Data Sheet (TDS). It is the responsibility of the user to ensure that the latest TDS is being used.

**NB: TO ORDER:** Quote product name, product code number, packaging, and colour.

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