



THE TATA PIGMENTS LTD

TECHNICAL DATA SHEET

Revision Date: 19.06.19

GENERAL DESCRIPTION:-

| | | |
|-----------------------|---|---|
| Product Name | : | Iron Oxide Orange |
| Type | : | Orange Pigment |
| Shade | : | 960 |
| Chemical Class | : | Synthetic iron oxide α -Fe ₂ O ₃ |
| Delivery Form | : | Powder |
| Color Index | : | Pigment Red (77491) Pigment Yellow (77492) |
| CI Name | : | Pigment Red 101 Pigment Yellow 42 |
| CAS | : | Red Oxide-1309-37-1 Yellow Oxide-51274-00-1 |

ABSOLUTE COLOUR VALUES

| Full Shade Binder – Test Paste made by Alkyd Resin (Non Drying) | | Tint Shade Binder – Test Paste made by Alkyd Resin(Non Drying) Tinted with Titanium Dioxide Rutile, grade 822 (1:3) | |
|--|-------|---|----------|
| L | 44.85 | L | 45.78 |
| A | 27.63 | A | 27.34 |
| B | 29.04 | B | 29.52 |
| C | 40.08 | C | 40.23 |
| H | 46.41 | H | 47.18 |
| DE compared with 960 std | 1 max | DE compared with 960 std | 1 max |
| | | Relative Tinting Strength | 95 - 105 |

CHEMICAL PROPERTIES:

| Parameters | Specifications | Test Method |
|---|----------------|--|
| Content of Fe ₂ O ₃ , % | 86 min. | IS 44:1991, ANNEX-B, Table1, Sl. No-(ix) |
| PH Value | 3-7 | IS 33:1992 21 |
| Oil Absorption, % | 20-30 | IS 33:1992 10 |
| Residue on 325 mesh, % | 0.5 max. | IS 33:1992 9 |
| Water soluble, % by mass | 0.3 max. | IS 33:1992 19 |
| Volatite at 100±5°C, % by mass | 1.0 max. | IS 33:1992 8 |



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| | | |
|---|-----------------|-----------------|
| Bulk Density, gm/cc | 0.6-0.8 | IS 33:1992 17 |
| Relative Density | 4.3 - 4.6 | IS 33:1992 16 |
| Acidity (as H ₂ SO ₄), % | 0.1, max | IS 33:1992 18 |
| Water wettability | Passed | ASTM C979 7.1 |
| Alkali resistance | Resistant | ASTM C979 7.2 |
| Total Sulfates | 0.3 – 0.7% | ASTM C979 7.3 |
| Atmospheric Curing Stability | Resistant | ASTM C979 7.5 |
| Light Resistance | Resistant | ASTM C979 7.6 |
| Effects on Concrete | | |
| A. 28-days Compressive Strength | 102% | ASTM C979 7.7.5 |
| B. B. Initial or Final Set | I* -15 F* +5 | ASTM C979 7.7.3 |
| Color Match of Shipment | DE* ≤ 1 | ASTM C979 7.8 |

Legends :

DE* = Colour Difference according to CIELAB

I* = Deviation in Minutes Initial

F* = Deviation in Minutes Final

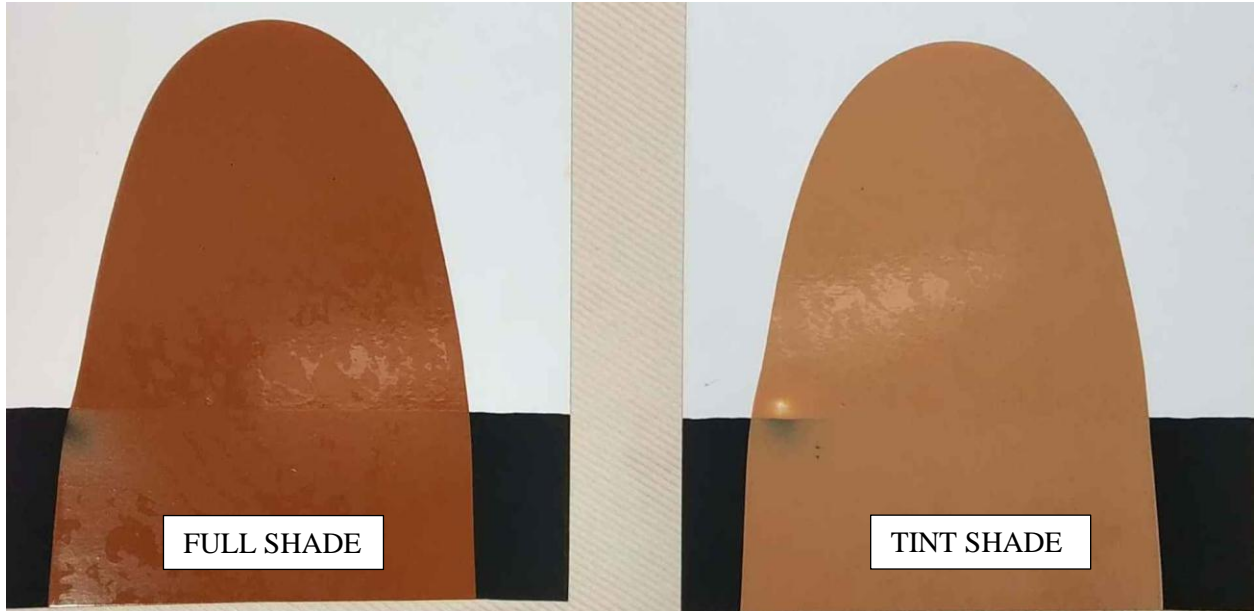
Standard = -60/+90

APPLICATIONS

| | | | |
|--------------------|-----------------------------|-------------------------|----------------------|
| Industrial Coating | Acrylic Paints | Roof tile Coating | Textile Industry |
| Decorative Paints | Paints & Coatings | Coil Coating | Wood Coating |
| Automotive Coating | Plastic and Rubber polymers | Wood Plastic Composites | Corrosion Protection |
| Leather Industry | Masterbatches | Mortar | Paver Blocks |
| Tiles | Noise barrier | | |



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Package: - 25kg bag HDPE bags

Mohua Srinivasan

Dy Manager(R&D & TS)