Product Specification Sheet:

Super Tinolux Paints
Exterior & Interior
Aliphatic polyurethane - alkyd modified industrial paints with good weather resistance & protective properties

Super Tinolux High Gloss Paint, series 1200
Super Tinolux Semi-gloss Paint, series 13700
Super Tinolux Satin Paint, series 20500

CHARACTERISTICS
Solvent-based one component paints containing aliphatic polyurethane blended with air drying fatty acids & alkyd resins to provide a tough protective finish with good weather and abrasion resistance for new and maintenance painting works in urban, coastal & industrial environments (ISO 12944-5 corrosivity category C2-C4).

The aliphatic polyurethane ingredients add marked advantages in resistance to weather, chemicals, abrasion & yellowing, as well as help retard combustibility and decontamination, making these paints appropriate as dust proof coatings that resist the effect of light traffic.

Super Tinolux Paints have excellent levelling properties & good resistance to detergent & cleaning solutions, stains, alcohol, oils, car petrol, inorganic salts & dry heat up to 90°C. They adhere well to alkyd, epoxy & acrylic based coatings.
They resist CO₂, chlorides and other acid gaseous compounds to diffuse into concrete structures and cause damage by carbonation.

TECHNICAL DATA

COMPOSITION

<table>
<thead>
<tr>
<th></th>
<th>Gloss Paint white color 1200</th>
<th>Semi-gloss Paint white color 13700</th>
<th>Satin Paint white color 20500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total solids, by volume</td>
<td>50%</td>
<td>49%</td>
<td>41%</td>
</tr>
<tr>
<td>Total solids, by weight</td>
<td>68%</td>
<td>67%</td>
<td>63%</td>
</tr>
<tr>
<td>Non-volatile vehicle by weight of vehicle</td>
<td>53%</td>
<td>51%</td>
<td>41%</td>
</tr>
<tr>
<td>Pigments, by weight</td>
<td>31%</td>
<td>32%</td>
<td>37%</td>
</tr>
<tr>
<td>Density kg/L</td>
<td>1.21</td>
<td>1.21</td>
<td>1.25</td>
</tr>
</tbody>
</table>

RECOMMENDED USES
For new or repaint works on steel, wood, concrete & masonry surfaces such as pylons, bridges, steel structures, balustrades, rolling shutters, trusses fixtures, fences, etc… in industrial areas & for walls & floors of light trafficable areas in car parks and warehouses.

High Gloss & Semi-gloss types series 1200 & 13700 are for exterior & interior applications.
Satin type series 20500 is for interior and undercover exterior applications.

SURFACE PREPARATION
Surfaces must be solid clean & dry, free from oils, salt, dirt, rust, efflorescence & other contaminants. Deteriorated previous coatings, friable paints, chalky or weathered surfaces should be removed vigorously, wire-brushed or sanded & cleaned properly. Non-disintegrated paints or glossy surfaces of previous coatings should be roughened with sand paper and tested for compatibility and adhesion.

Unpainted Wood:
Holes, cracks, nail holes etc… should be made good with appropriate putty. Resinous knots should be cleaned and treated with a proper wood isolator. Smooth surface with sand paper & dust-off.

Unpainted Steel:
Surfaces should be rust free, degreased and cleaned. Best results are obtained by sand or steel blasting to International Standards. ISO 12944-5 recommends sand blasting to Sa2½ Standards for surfaces to be protected in high corrosivity environment (category C4), & in medium corrosivity environment (category C3).

Mechanical & manual cleaning to St2 Standards could be adequate for low & medium durability periods in medium corrosivity environment (C3) & in low corrosivity environment (categories C2 & C1).

Unpainted Concrete or Plaster:
Rub down the surface with emery stone (sand stone) to remove nipples, efflorescence, laitance etc… & dust-off. Water jet provides good cleaning standards. Shot blasting of floor surfaces provides best results, though acid etching pretreatment could be adequate for some jobs. Holes, cracks and surface irregularities could be made good with TINOCRETE FILL COAT (refer to TINOCRETE product specs).

PRIMING

Steel surfaces:
Steel surfaces require precoating with TINOLUM ANTI-RUST PRIMER 15060 or 15071 or 15080. 80µm d.f.t. is recommended to provide adequate rust protection in coastal or polluted urban environments, and 40µm d.f.t. in low corrosivity environments.

In a dry environments, TINOLUM METAL PRIMER 15090 or 15091 at 40µm d.f.t. are usually adequate.

In aggressive environments (C3-C4) TINOPOXY ANTI-RUST PRIMERS Nr. 15420/ 15432/ 15435 & 15440 or TINOPOXY ZINC RICH PRIMER Nr. 15400 constitute excellent priming coats. TINOPOXY H.B. INTERMEDIATE COATING series 17100 serves as an excellent undercoat.

Galvanized surfaces:
Pre wash zinc coated surfaces with TINOPRIME ACTIVATOR 7 (etching solution) followed by cleaning with water (detergent cleaning), touch up welds and scratches with TINOPOXY ZINC RICH PRIMER 15400 and prime all surface with a thin coat of TINOPRIME PRIMER 15770 which also serves as a good pre-treatment on aluminium surfaces, or with TINORETHANE ANTI-RUST PRIMER Nr. 15312 or 15313.

Concrete surfaces:
Unpainted concrete substrates to receive putty filler need priming with alkali resistant water-based primer SEALOMAT CLEAR PRIMER SEALER Nr. 15020. Fully cured substrates could be primed with oil based primers TINOLUM PIGMENTED PRIMER Nr. 15040 or TINOLUM NON-PIGMENTED PRIMER Nr. 15050. On chalky or weathered previous coatings, TINOLUM PIGMENTED PRIMER Nr. 15040 serves as a good primer conditioner for most surfaces. If these surfaces are highly absorbent, use TINOLUM NON-PIGMENTED PRIMER Nr. 15050. Floor substrates need priming with SUPER TINOLUM CLEAR VARNISH Nr. 15140 diluted up to 100%.

Wood surfaces:
Knots in wood need treatment with a proper wood isolator. Impregnate unpainted surfaces with TINOLUM NON-PIGMENTED PRIMER 15050 diluted up to 100%.

In all cases, the priming coat should be roughened slightly with sand paper to ensure adequate intercoat adhesion, if top coating is delayed.

THINNING
APPLICATION
As per code of practice and recommendations of ISO 12944-5.

Wood & concrete substrates:
Prime surface as recommended above (priming): where putty is needed, apply TINOPUTTY 1 and/or TINOFIL PUTTY 15030 (for interior applications) or TINOTRAFFIC EMULSION PUTTY, series 10600/10700 (for exterior applications), sand & dust off then apply one intermediate coat of TINOLUX UNDERCOAT series 5000 & top-coat with Super Tinolux Paint.
Usually 1-2 finishing coats are needed, depending on thickness & service life required.

Steel surfaces:
ISO 12944-5 “protective paint systems” recommend application of these types of paints for protection of steel surfaces as per the following paint systems:

In high corrosivity environment category C4 (industrial & coastal areas of moderate salinity & pollution) for:

- Low durability range of 2-5 years:
  - Primer 80µm d.f.t.
  - Intermediate 40µm d.f.t.
  - Top coat 80µm d.f.t. 200µm d.f.t.

In medium corrosivity environment category C3 (urban & low polluted industrial atmosphere, coastal areas with low salinity, food processing plants, laundries, dairies, breweries etc...) for:

- Medium durability range of 5-15 years:
  - Primer 80µm d.f.t.
  - Intermediate 40µm d.f.t.
  - Top coat 40µm d.f.t. 120µm d.f.t.

- Low durability range of 2-5 years:
  - Primer 80µm d.f.t.
  - Intermediate 40µm d.f.t.
  - Top coat 40µm d.f.t. 80µm d.f.t.

In low corrosivity environment category C2 (buildings, sports halls, depots, low polluted atmosphere and rural areas):

- Low durability range of 2-5 years:
  - Primer 40µm d.f.t.
  - Top coat 40µm d.f.t. 80µm d.f.t.

- Medium durability range of 5-15 years:
  - Primer 80µm d.f.t.
  - Top coat 40µm d.f.t.

In maintenance painting, remove rust spots, clean and touch up with compatible primer conditioner & follow by the appropriate paint system.

Delay in recoating necessitates roughening of the preceding coat with sand paper. Do not subject painted floors to traffic before through drying. Do not apply on uncured concrete substrates to avoid saponification. These paints tend to slightly yellow in interior environments.

CONDITION OF APPLICATION
Can be applied at surface temperatures from 5°C. Apply only to surfaces with temperatures at least 5°C above the dew point. This product may be applied optimally at relative humidity ranging from 30% to 65%. Good ventilation is necessary. The product should not be exposed to mechanical stress until fully cured.

APPLICATION EQUIPMENT

Brush: Recommended for coating small areas

Roller: Typical phenolic core rollers should be used

Conventional spray: Pressure pot equipped with dual regulators, 3/8” I.D. Minimum material hose, .070” I.D.50” fluid tip and appropriate air cap.
Airless Spray

Pressure at nozzle: 1500 - 2100 psi
Nozzle tip: 0.013" - 0.015"

DRYING & RECOATING TIME
At a temperature of 23°C and 65% r.h., a coated film of 100 µm w.f.t.
- Dries to touch in about 3 hours.
- Dries to recoat overnight.
- Dries to handle in about 24 hours.
Through drying is usually attained within one week.

GLOSS
Available in high gloss finish series 1200, semi-gloss finish series 13700, & satin finish series 20500.

COVERAGE
Depending on the film thickness required & condition of the surface. In normal application, contents of 1US gallon of:
Gloss Paint, series 1200 cover 47sq.m. at 40µm d.f.t.
Semi-gloss Paint, series 13700 cover 46sq.m. at 40µm d.f.t.
Satin Paint, series 20500 cover 39sq.m. at 40µm d.f.t.

COLORS
Light & trim colors as per color card.

PACKING
In cylindrical tin containers of the following capacities:
• 1US gallon = 3.78 L. e
• 1US quart = 0.95 L. e
• 5 US gallons pail = 18.9 L. e (on request)

CAUTION
Flammable liquid, keep away from flame and high heat. Avoid inhalation of vapour & spray mist and allow for adequate ventilation, especially when spraying in confined areas.

WARRANTY
TINOL products are warranted to be free of material and manufacturing defects, and to give the performance required of good quality coatings of International Standards, when properly applied in accordance with the written directions and the Code of Practice.
If any product proves to contain material or manufacturing defects that substantially affect its performance, it will be either replaced free of charge or purchase price will be reimbursed. Other liabilities or claims for any consequential loss or damage are disclaimed.

DISCLAIMER
The information in this document is given to the best of Tinol’s knowledge, based on laboratory testing and practical experience. Tinol’s products are considered as finished goods and as such, products are often used under conditions beyond Tinol’s control. Tinol cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Tinol reserves the right to change the given data without further notice.
Users should always consult Tinol for specific guidance on the general suitability of this product for their needs and specific application practices.