

# 1844 PU OPACO HT

TWO-PACK POLYURETHANE TOP COAT



Two-component



See warnings



Spray

## Description and Use

Matt polyurethane finishing coat based on polyester resin and isocyanate adduct.

Recommended for painting cycles when excellent outdoors weathering resistance is required, together with high surface spreadability and ease of application.

Product for general use in industrial cycles as for structural steel, metal furniture, machine tools.

It can be coloured using the ADVANCE HT tinting system.

## Substrate preparation

### IRON SURFACES:

- Remove any trace of rust, iron scale, grease and moisture by sand-blasting SA2.5 grade; otherwise, carry out a careful mechanical cleaning followed by solvent degreasing.
- Apply FONDO R.E. code 1827 or FONDO EPOX code 1806, 1899, 1913.

### GALVANIZED STEEL:

- Remove iron scale and foreign matters, degrease carefully with organic solvents.
- Apply FONDO EPOX code 1806, 1899, 1913.

### ALUMINIUM AND LIGHT ALLOYS:

- Chromatising or phosphochromatising treatment; otherwise, slight matting with sandpaper followed by organic solvent degreasing.
- Apply FONDO EPOX code 1806, 1899, 1913.

## Application

### Application method:

- Air spray gun (conventional) with nozzle Ø 1.4-1.6 mm and pressure of 1.5-2.0 bar.
- airmix: do not diluite, nozzle Ø 0.009", exit pressure of the product 130 – 140 bar, auxiliary air pressure 2.5 –3.0 bar

**Product preparation:**

Stir thoroughly the product to achieve even colour and consistency.

Then add in the following ratio:

|                                                                                                                             | By weight |
|-----------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>PRODUCT</b><br>1844 PU OPACO HT                                                                                          | 100       |
| <b>HARDENER</b><br>1873 INDURITORE PER ACRILICI/PU ININGIALLENTE or<br>1882 INDURITORE PER ACRILICI/PU ININGIALLENTE RAPIDO | 25        |
| <b>THINNER</b><br>1611 DILUENTE EXTRA PU or<br>1653 DILUENTE PER ACRILICI or<br>1624 DILUENTE LENTO UNIVERSALE IND          | 5-15      |

**How to prepare intermediate matte finishes:**

To obtain intermediate levels of mat effect, the product can be mixed with 18180000 CONVERTER POLIURETANICO EXTRA LUCIDO according to the quantity in the following table:

| INTERMEDIATE MATTE TABLE WITH 1818 | 5-10 gloss | 20-30 gloss | 50-60 gloss | 70-80 gloss | 95 gloss |
|------------------------------------|------------|-------------|-------------|-------------|----------|
| 18440000 CONVERTER PU OPACO HT     | 100        | 90          | 80          | 70          | 0        |
| 18180000 CONVERTER PU EXTRA LUCIDO | 0          | 10          | 20          | 30          | 100      |
| 1873 INDURITORE                    | 25         | 25          | 30          | 30          | 50       |

**Code 1844 and code 1818 percentages are referring to converter as is, not yet tinted, and are expressed as percentages in weight.**

**Hardener code 1873 amount is referred to the colored converter, and is expressed in weight.**

The intermediate levels of matt, which can be achieved through mixing the two converter are purely indicative, since they can vary due to the tint, the thickness and to drying speed.

**Dark colours, high temperatures or high thicknesses can lead to a glossier film than those recorded in the table.**

## Storage life

If stored in a cool, dry place, away from sources of heat and sheltered from sunlight, in its sealed original packaging, the product has a shelf life of 12 months. Check the product's shelf life by referring to the production batch number shown on the packaging. The batch number is made of eight numeric characters in which the first four digits identify the year and month of production. Once the product has expired, it must be disposed of in accordance with the current legislation.

## Technical features

|                                                                                                      |                                                                   |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Colour                                                                                               | see price list                                                    |
| Appearance of the dry film                                                                           | matt                                                              |
| Gloss                                                                                                | 5-10 gloss (Gardner 60°)                                          |
| Type of product                                                                                      | two component                                                     |
| Specific weight                                                                                      | 1.14 - 1.18 kg/l                                                  |
| Dry residue                                                                                          | 56.7 % component "A"                                              |
| Pot-life                                                                                             | 2.5 hours. At higher temperatures pot-life decreases.             |
| Number of coats recommended                                                                          | 2 waiting 5-10 minutes for flash off between the 1st and 2nd coat |
| Recommended wet thickness                                                                            | 80-100 µm per coat                                                |
| Recommended dry thickness                                                                            | 50-60 µm with 2 coats                                             |
| Maximum thickness                                                                                    | 220 µm wet equivalent to 70 µm dry                                |
| Application viscosity                                                                                | 18 - 22 sec. cup FORD 4                                           |
| Practical cover rate *                                                                               | 3-4 m²/kg (2 layers)                                              |
| Air drying                                                                                           | 20-30 minutes, dust free                                          |
|                                                                                                      | 3-4 hours, dry to touch                                           |
|                                                                                                      | 24 hours, through drying                                          |
| * The cover rate is calculated on the suggested thickness and applied on plane and regular surfaces. |                                                                   |
| ** May change according to the colour.                                                               |                                                                   |
| The data are measured at a temperature of 20°C and 65% R.H.                                          |                                                                   |

## Warnings

- The product contains synthetic polymer microparticles (SPM).
- **INSTRUCTIONS TO PREVENT THE RELEASE OF SYNTHETIC POLYMER MICROPARTICLES INTO THE ENVIRONMENT**
- In accordance with Regulation (EU) 2023/2055, please follow the procedures below to prevent environmental release.
- During use and application, avoid accidental release of the product onto soil, into drains, or household wastewater. Apply the product only to the surfaces to be treated.
- Any remaining product should be stored by tightly sealing the original container. Dispose of the product/container in accordance with national regulations.
- If you wish to reuse the tools used for application, follow these steps to clean them in an environmentally responsible manner.
- The water, solvents or thinners used for cleaning tools, as well as any product residues, MUST NOT be released into the environment or poured down domestic drains.
- Remove as much product as possible from the tools used.
- Soak the tools in hot water or in solvent for at least a couple of hours, then remove them from the container.
- Allow the water in the bucket to evaporate and let the tools dry. For solvent-based products, close the container. Do not release the product into the environment and do not pour it into drains.
- Deliver the container with any remaining product / wash water / solvent / cleaning thinner to an authorised waste collection centre, in accordance with national regulations.

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## Warnings

- For industrial use only.
- Exclusively for use not restricted from Directive 2004/42/EC.
- Always refer to the safety data sheet for the relevant products.
- During application, it is recommended to follow the thicknesses specified for each single coat. Otherwise, and especially in case of high environment temperature, blisters may come up on the film surface.
- Do not apply at temperatures below +10°C.
- Do not apply the product after the specified pot life, as the film that forms may have poor adhesion to the substrate.
- It is recommended to acquire all the material required to finish the work of the same batch.
- The information provided on this technical datasheet is based on our technical and practical knowledge and experience. The technical data refer to the average characteristics of the basic product and are determined under controlled laboratory conditions. The variability of the raw materials available on the market and the tinting of the product can lead to slight deviations in the declared values, in the colour and in the aesthetic effects obtained. It is therefore necessary for the purchaser/user to personally verify, before application, the suitability of the product for the intended use, in particular when different batch numbers of the same material are used in the same work/site.

The above mentioned data are meant to facilitate our customers in the use of our products. IMPA is not responsible for applications of products carried out beyond its direct control. For further technical information about specific systems and/or special applications, please contact our TECHNICAL SERVICE at [assistenza.technica@impa.it](mailto:assistenza.technica@impa.it).