

## PRODUCT DATA SHEET

**ACRILCAP 47**
**Aliphatic polyurethane acrylic undercoat - finish**

**CHARACTERISTIC**

It is a satin enamel, non-yellowing and dual-component, based on hydroxylated acrylic resin and aliphatic isocyanate, drying at room temperature or forced air. The dried film is characterized by excellent elasticity, resistance to abrasion, to the attack of chemical and atmospheric agents and it ensures a long lasting colour. It also has excellent resistance in corrosive, industrial and marine environments, with high shock resistance. It catalyzes with Induritore Poliuretano MS.

**USE**

It is used as a finish on bi-component undercoats, acrylic or epoxy, or as a single coat on different metals such as galvanized steel, aluminum, light alloys, plastics, where it is required high mechanical and UV resistance, and good aesthetical effect. It is indicated in the painting of industrial bodywork, containers, chemical plants, port facilities, wind farms.

| PROPERTY OF THE PRODUCT | VALUE        | METHOD |
|-------------------------|--------------|--------|
| Specific weight (A+B)   | 1100-1200g/l |        |
| Application temperature | <+120 °C     |        |
| Flash point             | >23°C ±2     |        |
| Solid by volume %       | 48±2%        |        |
| VOC (A+B)               | 420 g/l      |        |

| SPECIFICATION DATA | VALUE         | METHOD       |
|--------------------|---------------|--------------|
| Specific weight    | 1125-1225 g/l | Internal PF3 |
| Gloss              | 55-65         | Internal PF6 |
| Pot-life           | > 5 h         | Internal PF7 |
| Drying Time        | Fully 20 h    | Internal PF2 |

| THICKNESS AND YIELD        | By Induritore Poliuretano MS | Min. | Max | Recommended |
|----------------------------|------------------------------|------|-----|-------------|
| Thickness of dry film (µm) |                              | 40   | 70  | 50          |
| Thickness of wet film (µm) |                              | 83   | 146 | 104         |
| Theoretical yield (m²/l)   |                              | 12   | 6,8 | 9,6         |
| Theoretical yield (m²/kg)  |                              | 10,4 | 5,9 | 8,4         |

**STORAGE**

Product is stable till one year as long as it is kept in original and unopened buckets at temperature between +5°C e +30°C.

**COLOUR**

The range of colors can be chosen in shades of RAL. Between one production and the other, tint may be slightly different, it is therefore important to finish the job with the same batch.

**PREPARATION OF SURFACE**

The treatment of the surface to be coated is of primary importance and affects the performance of the coating cycle.

A good and correct preparation of the substrate is a guarantee of quality on the duration of the coating: a high quality product applied on a poor substrate or on substrate inadequately treated is destined to an early wear, characterized by

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possible alteration of the coating itself .

**HOT GALVANIZED STEEL**

It is important to remember that the galvanized sheet must be passivated leaving the products exposed to atmospheric agents for at least two months; then proceed with a light sanding to remove the superficial oxidation patina formed and degrease the surfaces with Nitro NV 5000 thinner.

Alternatively, a light silica sandblasting is recommended.

**ALUMINUM AND LIGHT ALLOYS**

Perform a light sanding with P180 P220 sanding paper. Clean the surface to be treated with Nitro NV 5000 thinner and make sure it is dry and free from silicone, waxes, greases and foreign substances in general.

**COATED SURFACES**

*With primer:* it can be painted if the substrate is clean and free of dirt, oil, grease, and the application falls within the maximum re-coat time of the primer. If cleaning is required, perform pressure washing grade Wa 2 (surface free of oil, grease, salt, dirt).

With complete finishing coat: if undamaged compatible and non-chalky perform cleaning from any oil and grease with detergent, then run sanding surface followed by pressure washing to remove dust and salts.

*Rusty coating:* perform mechanical preparation St2 or St3 followed by pressure washing to remove oil, grease, dust and salt or sand blasting Sa2 or Sa2½; then restore the thickness of primer.

*Localized maintenance:* perform mechanical preparation St2 or St3 followed by pressure washing to remove oil, grease, dust and salt or sand blasting Sa2 or Sa2½. Round off the edges of the well anchored painting and restore the system in the original layers and thicknesses.

**TOOLS**

Conventional spray or airless (high temperature and humidity <40%), roller, brush (for small surfaces and profiles).

**APPLICATION**

|                                   |  |
|-----------------------------------|--|
| Mix ratio in weight               | 100:25 by Induritore Poliuretano MS                            |
| Mix ratio in volume               | 100:30 by Induritore Poliuretano MS                            |
| Thinning                          | 0-5% by Diluente Butol   |
| Application time at 23°C          | Max 5h   |
| Application condition             | +5°C +40°C   |
|                                   | >3°C at dew point  |
|                                   | Relative humidity: <70%  |
| Application by airless            | Nozzle pressure: 15 MPa (150 kp/cm², 2100 psi).                |
|                                   | Nozzle: 0,28 - 0,38 mm (0,011 - 0,018")                        |
|                                   | Angle range: 40 - 80°  |
|                                   | Air pressure: Compression ratio 30:1 (pressure 150-180 kg/cm²) |
| Application by conventional spray | Nozzle: 1,6 - 1,8 mm   |
|                                   | Angle range: 30 - 50°  |
|                                   | Air pressure: 3,5-4 kg/cm²                                     |
| Thinner for washing               | Nitro NV 5000  |

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**DRYING TIME** Dry time are purely indicative as it might be longer or shorter by keeping in consideration ventilation, humidity, thickness of the applied film. In over coating, best adhesion can be obtained when next application is done before catalysis is completed.

DTF 60 micron

| Surface temperature              | 5°C    | 10°C   | 23°C | 30°C |
|----------------------------------|--------|--------|------|------|
| Out touch                        | 2h     | 60'    | 45'  | 30'  |
| Dry touch                        | 16h    | 8h     | 4h   | 3,5h |
| Full catalysis                   | 3 days | 36h    | 20h  | 18h  |
| Minimum time of over application | 16h    | 8h     | 4h   | 3,5h |
| Maximum time of over application | 5 days | 3 days | 48h  | 36h  |

**RECOMMENDED PRIMER**  
**RECOMMENDED SYSTEM**

Urban, industrial, marine atmosphere

| Product       | Coat     | Wet Thickness | Dry thickness |
|---------------|----------|---------------|---------------|
| Epoxy zinc 14 | 1        | 80            | 60            |
| Capmastic ST  | 1        | 200           | 120           |
| Acrilcap 47   | 1        | 104           | 50            |
| <b>Total</b>  | <b>3</b> | <b>384</b>    | <b>230</b>    |

**ALTERNATIVE SYSTEM**

| Product         | Coat     | Wet Thickness | Dry thickness |
|-----------------|----------|---------------|---------------|
| Epoxy zinc 2K   | 1        | 90            | 60            |
| Primer 40 HS ST | 1        | 200           | 120           |
| Acrilcap 47     | 1        | 104           | 50            |
| <b>Total</b>    | <b>3</b> | <b>394</b>    | <b>230</b>    |

| Product      | Coat     | Wet Thickness | Dry thickness |
|--------------|----------|---------------|---------------|
| Filler 46    | 1        | 123           | 90            |
| Acrilcap 47  | 1        | 104           | 50            |
| <b>Total</b> | <b>3</b> | <b>227</b>    | <b>140</b>    |

**INSTRUCTIONS**

To carry out the work in a proper way, it is needed to strictly follow the instructions for the preparation of the surfaces contained in the CAP Arreghini Books. The specification data and technical information have been calculated at +23°C with relative ambient humidity of 65%. In different conditions the data and the time intervals between the two phases of the above reported coating system may vary. This technical information is intended as a rough guide. However, because of the enormous variety of media and application conditions, it is essential to check the suitability of the product and test the effectiveness on a sample.