

PRODUCT DATA SHEET

ACRILCAP 42 HS PC
Aliphatic polyurethane acrylic undercoat – finish high build

PRODUCT DESCRIPTION Glossy undercoat-topcoat based on acrylic resin, hydroxylated and aliphatic isocyanate, drying at room temperature or forced air. The dried film is characterized by excellent elasticity, abrasion resistance, chemical resistance, atmospheric agents and ensures high color durability. It also has excellent resistance in corrosive environment, industrial and marine, ensuring high impact resistance. Typically cured with MS Polyurethane Hardener. Cured with induritore PUR PC when reach high dry thickness and low VOC are requested.

RECOMMENDED 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)	1030-1130g/l	
Application temperature	<+120 °C	
Flash point	>23°C ± 2	
Solids (vol %)	50 ± 2% with Induritore PUR PC	
Solids (vol %)	46±2% with Induritore Poliuretanico MS	
VOC (A+B)	387 g/l with Induritore PUR PC	
VOC (A+B)	420 g/l with Induritore Poliuretanico MS	

TECHNICAL DATA

	VALUE	METHOD
Specific weight	900-1200 g/l	Internal PF3
Gloss	>80	Internal PF6
Drying Time	Fully 24 h	Internal PF2
Pot-life	> 5 h	Internal PF7

FILM THICKNESS AND SPRADING RATE

Induritore PUR PC	Minimum	Maximum	Typical
Film thickness, dry (µm)	45	100	60
Film thickness, wet (µm)	90	200	120
Theoretical spreading rate, m²/l	11	5	8,3
Theoretical spreading rate, m²/kg	10,2	4,6	7,7
Induritore Poliuretanico MS	Minimum	Maximum	Typical
Film thickness, dry (µm)	40	60	50
Film thickness, wet (µm)	87	130	108
Theoretical spreading rat, m²/l	11,5	7	10
Theoretical spreading rate, m²/kg	10,7	6,5	9,3

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.

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**SURFACE
PREPARATION**

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 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.

**APPLICATION
METHODS**

Conventional spray or airless (high temperature and humidity <40% is possible the formation of "dusting"), roller, brush (for small surfaces and profiles).

**APPLICATION
DATA**

Mixing ratio (weight)	100:25 with Induritore Poliuretano MS
	100:20 with Induritore PUR PC
Mixing ratio (volume)	100:30 with Induritore Poliuretano MS
	100:22 with Induritore PUR PC
Thinner	0-5% with Diluente Poliuretano
Pot life 23°C	5-6 h
Condition during application	+5°C +40°C
	>3°C at dew point
	Relative humidity:<70%
Guiding data airless spray	Pressure at nozzle:15 MPa (150 kp/cm², 2100 psi.).
	Nozzle: 0,28 - 0,38mm (0,011 - 0,018")
	Spray angle; 40 - 80°

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Guiding data conventional spray	Air pressure: compression ratio 30:1 (pressure 150-180 kg/cm ²)
	Nozzle: 1,6 – 1,8mm
Cleaner	Spray angle: 30 - 50°
	Air pressure: 3,5-4 kg/cm ²) Acetone per lavaggio

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 µm				
Substrate temperature	5°C	10°C	23°C	30°C
Surface dry	3h	90'	60'	40'
Through dry	24h	10h	6h	3,5h
cured	5g	48h	24h	18h
Dry to recoat, minimum	16h	8h	6h	3,5h
Dry to recoat, maximum	5	3gg	48h	36h

 RECOMMENDED
PRIMER

Poly-acrylic, epoxy.

TYPICAL SYSTEM

Industrial and marine atmosphere

Product	Layers	Wet film thickness	Dry film thickness
Cap Zinc 14	1	80	60
Capmastic ST	1	200	120
Acrilcap 42 HS PC	1	120	60
Total	3	400	240

 ALTERNATIVE
SYSTEM

Product	Layers	Wet film thickness	Dry film thickness
Epox zinc 2K	1	90	60
Primer 40 HS ST	1	200	120
Acrilcap 42 HS PC	1	120	60
Total	3	401	240

Product	Layers	Wet film thickness	Dry film thickness
Filler 46	1	123	90
Acrilcap 42 HS PC	1	120	60
Total	2	243	150

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.

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