

## PRODUCT DATA SHEET

**ACRILCAP 42**
**Aliphatic polyurethane acrylic top coat**

**CHARACTERISTIC**

It is a glossy, non-yellowing, two-component enamel based on hydroxylated acrylic resin and aliphatic isocyanate, drying at room temperature or forced air. The dried film is characterised by excellent elasticity and resistance to abrasion, impact and attack by chemical and atmospheric agents. It ensures high colour durability and has excellent resistance in corrosive, industrial and marine environments. It is catalysed with MS Polyurethane Hardener or HS Polyurethane Hardener if a higher dry film thickness with low VOC is desired.

It is used as a topcoat on acrylic or epoxy two-component primers or as a single coat on various metals such as galvanised steel, aluminium, light alloys, plastic, where high mechanical and UV resistance and good aesthetic characteristics are required. It is suitable for painting industrial bodywork, containers, chemical plants, port equipment, wind turbines.

**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)	1000-1100g/l	
Application temperature	< +120 °C	
Flash point	>23°C +/-2	
Solid by volume %	50±2% by Induritore Poliuretano HS 46±2% by Induritore Poliuretano MS	
Pot-life	> 5 h	Internal PF7
Drying Time	Fully 20 h	Internal PF2

SPECIFICATION DATA		VALUE		METHOD
	Specific weight	950-1050 g/l		Internal PF3
	Gloss	> 80		Internal PF6
THICKNESS AND YIELD	By Induritore Poliuretano HS	Min.	Max	Recommended
	Thickness of dry film (µm)	45	100	60
	Thickness of wet film (µm)	90	200	120
	Theoretical yield (m²/l)	11	5	8,3
	Theoretical yield (m²/kg)	10,5	4,8	7,9
	By Induritore Poliuretano MS	Min.	Max	Recommended
	Thickness of dry film (µm)	40	70	50
	Thickness of wet film (µm)	87	152	109
	Theoretical yield (m²/l)	11,5	6,6	9.2

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	Theoretical yield (m <sup>2</sup> /kg)	11	6,3	8.8
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	<p>The treatment of the surface to be coated is of primary importance and affects the performance of the coating cycle.</p> <p>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.</p> <p><b>HOT GALVANIZED STEEL</b></p> <p>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.</p> <p><b>ALUMINUM AND LIGHT ALLOYS</b></p> <p>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.</p> <p><b>COATED SURFACES</b></p> <p><i>With primer:</i> 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).</p> <p><i>With complete finishing coat:</i> 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.</p> <p><i>Rusty coating:</i> 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.</p> <p><i>Localized maintenance:</i> 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.</p>			
TOOLS	Conventional spray o airless (high temperature and humidity <40% is possible the formation of "dusting"), roller, brush (for small surfaces and profiles).			

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APPLICATION	Mix ratio in weight	100:25 by Induritore Poliuretano MS 100:12,5 by Induritore Poliuretano HS
	Mix ratio in volume	100:30 by Induritore Poliuretano MS 100:15 by Induritore Poliuretano HS
	Thinning	0-5% by Diluente Butol
	Application time at 23°C	> 5h
	Application condition	+5°C +40°C > 3°C at dew point Relative humidity: < 70%
	Application by airless	Nozzle pressure: 15 MPa (150 kp/cm <sup>2</sup> , 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/cm <sup>2</sup> )
	Application by conventional spray	Nozzle: 1,6 - 1,8 mm Angle range: 30 - 50° Air pressure: 3,5-4 kg/cm <sup>2</sup>
	Thinner for washing	Nitro NV5000

## 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

Poly-acrylic, epoxy.

 RECOMMENDED  
SYSTEM

Product	Coat	Wet Thickness	Dry thickness
Epoxy zinc 2K	1	90	60
Primer 40 HS ST	1	200	120
Acrilcap 42	1	120	60
<b>Total</b>	<b>3</b>	<b>410</b>	<b>240</b>

 ALTERNATIVE  
SYSTEM

Product	Coat	Wet Thickness	Dry thickness
Filler 46	1	123	90
Acrilcap 42	1	120	60

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Total	2	243	150
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## 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.