

ICGP SYSTEM FLAT GLASS DECORATING COLOURS

incolours.com







## Inco: Colour innovation industry

### Over 35 years of on the ground experience

Inco was born as an independent production reality hallmarking throughout the years a meticulous-scientific approach thanks to super high-tech manufacturing facilities.

The direct contact with our customers allows us to critically analyze our products on the market through a vividly creative method, offering special innovative products with the goal of providing additional value to the industrial process.

We believe that it is vital to be constantly focused on innovation and on the key that drives it. We believe that it is necessary to proficiently master our product's technology. We believe that it is emblematic to share common goals with our customers and create value for them.

# The right colour for every solution

**Inco Industria Colori** is an inorganic pigment colour manufacturer that stands out for its **research** and **development**, **innovation**, and **continuous improvement**.

Inco was brought to light over 35 years ago on the green surrounding hills, only a few kilometers away from Sassuolo's ceramic district. An idea brought up by a few friends with the intention to transform more than twenty years of ceramic experience into an exciting new challenge. The first batch of brown pigment was produced, from a small muffle. However, it was only the beginning of a specialized **production of inorganic ceramic pigments**. A broad chromatic gamut that provided the business with great national and foreign success.

Inco's **Headquarters** & **Research Center** is situated in **Pavullo nel Frignano (Modena)**; in addition to other manufacturingwarehousing-distribution plants in different countries worldwide, like **India** and **Russia**.



Inco offers inorganic pigments for **paint**, **plastic**, **glass**, **coating** and **ceramic** 

**decoration**. A solid facility with a research center and an inner manufacturing system to help study, project, optimize and create inorganic pigments - the company's core business - with a quality guarantee.

Inco has obtained the **ISO 9001:2015** certification which ensures that every aspect of the work is subjected to strict quality standards, ensuring so an excellent service and highest level products.

Now Inco is a global reality capable of supporting and supplying customers in over 35 countries all over the globe and it's in continuous growth.



We base our work on discipline, hard work and perseverance, enthusiasm, passion, and innovation. We focus first on power and development, prior to our products and expertise.



## Inco's skills

Continuous improvement, personal growth, technology, and innovation.

Inco works on all the value-added chains to create **highperforming products**. Both our problem-solving and continuous improvement drive the company to be our customers' best **strategic partners**.

Development & Research, cutting-edge machinery and equipment, capacity-building, and personal growth are our company's cornerstones that flash Inco towards important targets.





## Always standing by our customers

For over 35 years Inco has been a strategic partner for its customers synergizing a symbiotic relationship:

- Expert customized guidiance for the perfect colour
- Inspirational creativity
- After-sales assistance

Inco is capable of fulfilling its customers' aspirations starting from selling its finished products to a highly personalized color and assistance.







5 841 5

# Inco's decorative glass paints

Designed for a **wide variety of glass applications**: architectural, household appliances, automotive, interiors, such as shower screens, glass partitions, glass furniture, doors, and showcases.

- Extremely versatile thanks to our 13 basic 5 metallic colors that cover every single coloring range and perform the best chromatic result ever
- They are easily **washable with water**, therefore water friendly
- Low odour
- Excellent abrasion resistance after drying & after tempering the glass
- Excellent resistance to abrasion,
- Excellent chemical resistance
- Excellent resistance to atmospheric agents
- Excellent light resistance
- Excellent heat- resistance





- Designed for on-glass application, they must be fired at the usual temperature for glass tempering and bending.
- ICGP colors are heavy metal-free and do not contain intentional additions of Lead (Pb), Cadmium (Cd), Mercury (Hg), and Hexavalent Chromium (Cr+6) as per RoHS regulations.
- Based on the countless tests on the resistance evaluation with alkalis, sulfide, acids (hydrochloric, acetic, sulfuric, citric) have excellent behaviors and they turn out with very similar color intensity to colors containing lead.
- Several technical and quality checks
- Abiding tone from batch to batch without colour drift.



COLOUR	INCO PRODUCT	DESCRIPTION
	10020	Satin
	10001	White
	10002	High Mattifying White
	10101	Yellow
	10100	Yellow
	10401	Amaranth
	10901	Green grass
	10900	Green
	10902	Petroleum Green
	10301	Blue
	10300	Cyan
	10400	Brown
	10500	Grey
	80001	Metal Grey
	80002	Metal Gold
	80004	Metal Copper
	80005	Metal Purple
	10600	Black



## Customized color options

A reserved area in which you can get the perfect **formula for any desired color** in color matching systems:

- RAL
- NCS
- Pantone
- Any colour chart

We provide support in order to develop and satisfy new requested colors from our customers (for example, also for color samples on glass or sheet metal).

With Inco's decorative glass paints, **paint rollers, veils, spray, and screen printing can be used, depending on the customer's needs** and the application sector.

Every different application of use – such as hobs, oven doors, or refrigerator shelves but also partitions, doors, furniture, windows – requires very high performance to ensure expressive freedom and outstanding results.





#### Special colour decorative glass paints

The range of decorative Inco glass paints in addition to the 13 basic colors, heavy metal-free, with which it is possible to obtain all the color ranges of the RAL, Pantone, and NCS color matching systems, includes special dyes, based on Cadmium and Selenium.

These special colors based on Cadmium Selenium allow us to obtain all the tones from a deep yellow to deep red moving through all the shades of orange, purple, amaranth pink.



The special colors also include **Bismuth-Based Colors** with high coverage and excellent acid resistance.



## Methods of application of decorative paints for Inco glass

Inco's ICGP series products have been developed with high viscosity to allow the regulation of viscosity on-site before application by the customer and thus allow various methods of application:

- roller
- veil
- spray
- screen printing

**The roller application** allows you to apply a variable amount of enamel, depending on the width of the roller, the type of roller, and the pressure applied, as well as the viscosity of the paste applied. It is necessary to make sure to dry the glass before tempering. The roller can be washed easily with water after its use.

The spray application allows you to minimize as much as possible the amount of product you would like to use. The overall thickness result depends on the spraying pressure, the spraying time, and the viscosity of the applied product. It can be unlimitedly applied, is **washable with water**, and can be air-dried.

The silk-screen printing application allows us to apply a thick paste based on the viscosity of the applied product and the number of meshes on the screen. The size obviously relates proportionally according to the screen dimension. Drying is recommended before tempering the glass.

The veil application allows us to apply a more significant amount of product. The thickness is conditioned by the viscosity of the product itself and the time spent in order to apply it. It is washable with water and it is very important to make sure everything is dry before tempering the glass.



### Different application sectors

**Inco** decorative glass paints are designed for a wide variety of glass applications, including architectural, household appliances, automotive, interior.



### Automotive

Inco's ICGP automotive paints comply with the strictest quality standards in thermal resistance both chemical and mechanical. They have a very **high optical density**, and therefore an **exceptional coverage with excellent glass performance**. Thanks to their features 100% **heavy metal-free & water washability** during the application phase, they are to be considered **eco-friendly**. They are easy to apply and guarantee **excellent performance**.





### Interior Design

The Line of Inco Decorative Paints for Interior Design Glass includes **13 matt colors and 5 metallic ones, all miscible** to obtain any tint of the RAL, NCS, and Pantone color matching systems. We offer different solutions for roller, veil, screen printing, or spray applications.





#### Architecture

The range of decorative paints for architectural glass is characterized by **excellent strength**, in line with the strictest regulations in the industry. Designed to comply with the technical regulations of the sector and respond to architectural aesthetic requests. It consists of **13 matt base colors and 5 metallic ones that can be mixed** to **obtain all possible colours**. They can be used for roller, veil, screen printing, or spray depending on the customer's needs.

#### Household appliances

The range of decorative glass paints for household appliances and consumer electronics use is based on the **13 basic colors and 4 metallized most requested by the market**, but offers the possibility to obtain **any color on request**. The paint, designed for this specific application, is **reliable and enduring over time**: excellent coverage, excellent chemical resistance. It does not create any health risk and does not harm the environment by being completely **heavy metal-free and being water washable** during the application phase. It also offers the possibility of the bismuth-based color range for high acid resistance.

## Certifications

$\sim$	Abrasion resistance ISO 1096-2 (Annex E)
$\checkmark$	Resistance to acids and bases ISO 10545-13
$\checkmark$	Sulphide resistance ASTM C77
$\checkmark$	Flexural strength ISO 10545-4
$\checkmark$	Linear thermal expansion coefficient ASTM E228 – by Tamb. up to 100°C
$\checkmark$	Thermal shock (-40 to 90°C) ISO 10545-9
$\checkmark$	Impact resistance EN 12980 EAD 090062-00-0404 - Annex G
$\sim$	Impact resistance on products for exterior cladding of buildings EAD 090062-00-0404 – Annex G
$\checkmark$	Durability to hygrothermal cycles according to EAD 090062-00-0404 Annex M
$\checkmark$	Water vapour resistance ISO 1096-2 (Annex B)
$\sim$	Colour fastness under the light DIN 51094
$\checkmark$	Release of substances into water EN 12457-2



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