

CICPS COMPLEX INORGANIC COLOURED PIGMENTS

www.incolours.it





Inco: Colour innovation industry

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.

Over 35 years of on the ground experience

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**, and **coating** and specs for 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.

Products with ancient background history, handed down through centuries from far lands all over the map, symbolize the evolution of civilization. Products that have been updated into **high-tech quality products** that **continuously add value** to the different manufacturings.

Inco has transformed into a global reality capable of serving and supporting customers in over 35 countries all over the globe with 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 high-performing 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.







assistance.

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

Inorganic pigments for paint and coatings

Complex Inorganic Coloured Pigments - CICPs – are the most stable class of **pigments developed by the color industry**.

Meeting high heat-stability and chemical inertia standards, as well as light and weather-fastness, and taking into account its **final product's sustainability**. Day after day, formulators become more and more increasingly significant meeting the market's demands under a lasting long-term standpoint, as well as for its quality.

Complex Inorganic Coloured Pigments – CICPs are inorganic pigments obtained by a mixture of two or more metal oxides followed by high temperature process.

When **metal oxides** such as **AI, Co, Fe, Cr, Zn,** etc...are blended and reach a high temperature exceeding 800 °C/1500 °F during the calcination process, they become reactive and form a new and more stable compound, with a different and stable crystalline structure: the so-called inorganic pigment.





Broad chromatic gamut

Based on which metal oxides are used, the percentage of different oxides, and the calcining temperature, we can obtain different pigment outcomes with different colors and crystalline structures.

The unique properties are directly related to high-temperature processing (above 800 °C/1500 °F), which requires sharp control over chemical and temperature parameters, ensued all thanks to our high-tech modern systems.

The so-called inorganic pigments have a granulometric and morphology distribution of controlled particles that offers:

- High coloring and hiding power
- Easily dispersed in different sets of formulated systems
- Easy applicability

Inco's ICCPs may have different granulometric distribution, therefore might have different oil absorptions.

PRODUCT NAME	MASS TONE	TINT	COLOR INDEX	PIGMENT	MEAN PARTICLE SIZE (µm)	CONDUCTIVITY (µS)	OIL ABSORPTION (ml/100g)	HEAT RESISTANCE (°C)
ICV 11/V260			P.Y.53	(Ni,Sb,Ti)O ₂	0,9 - 1,3	< 500	15-18	800
ICV 11/V253			P.Y.53	(Ni,Sb,Ti)O ₂	0,9 - 1,3	< 500	15-18	800
ICV 11/V270			P.Y.53	(Ni,Sb,Ti)O ₂	0,9 - 1,3	< 500	15-18	800
ICV 11/V275			P.Y.53	(Ni,Sb,Ti)O ₂	0,9 - 1,3	< 500	15-18	800
ICV 11/V250			P.Br.24	(Cr,Sb,Ti)O ₂	1,0 - 1,5	< 500	17-20	800
ICV 11/V240			P.Br.24	(Cr,Sb,Ti)O ₂	1,0 - 1,5	< 500	17-20	800
ICV 11/V245			P.Br.24	(Cr,Sb,Ti)O ₂	1,0 - 1,5	< 500	17-20	800
ICV 11/V224			P.Br.24	(Cr,Sb,Ti)O ₂	1,0 - 1,5	< 500	17-20	800
ICV 12/V380			P.Bl.28	CoAl ₂ O ₄	1,0 - 1,5	< 500	27-30	800
ICV 12/V352			P.BI.28	CoAl ₂ O ₄	1,0 - 1,5	< 500	27-30	800
ICV 12/V350			P.Bl.28	CoAl ₂ O ₄	1,0 - 1,5	< 500	27-30	800
ICV 12/V370			P.BI.28	CoAl ₂ O ₄	1,0 - 1,5	< 500	27-30	800
ICV 12/V336			P.BI.36	Co(Al,Cr) ₂ O ₄	1,0 - 1,5	< 500	14-17	800
ICV 12/V340			P.Bl.36	Co(Al,Cr) ₂ O ₄	1,0 - 1,5	< 500	14-17	800
ICV 12/V365			P.Bl.36	Co(Al,Cr) ₂ O ₄	1,0 - 1,5	< 500	14-17	800
ICV 12/V390			P.Bl.36	Co(Al,Cr) ₂ O ₄	1,0 - 1,5	< 500	14-17	800
ICV 18/V910			P.G.50	(Co,Ni,Zn) ₂ (Ti,Al)O ₄	0,9-1,4	< 500	16-19	800
ICV 18/V920			P.G.50	(Co,Ni,Zn) ₂ (Ti,Al)O ₄	0,9-1,4	< 500	16-19	800
ICV 18/V970			P.G.26	(Co,Zn) ₂ Cr	0,9-1,4	< 500	16-19	800
ICV 13/V430			P.Br.29	(Fe,Cr)O ₃	1,0 - 1,5	< 500	22-25	700
ICV 13/V440			P.Br.29	(Fe,Cr)O ₃	1,0 - 1,5	< 500	22-25	700
ICV 15/V625			P.Bk.28	CuCr ₂ O ₄	1,2 - 1,7	< 500	16-19	800
ICV 15/V630			P.Bk.28	CuCr ₂ O ₄	1,2 - 1,7	< 500	16-19	800
ICV 15/V640			P.Bk.28	Cu(Cr,Fe) ₂ O ₄	1,2 - 1,7	< 500	16-19	800
ICV 15/V650			P.Bk.27	Co(Cr,Fe) ₂ O ₄	1,2 - 1,7	< 500	16-19	800
ICV 10/V110			P.Y.184	BiVO ₄	0,7-1,2	< 500	37-40	300

Features & performance

This typology of inorganic pigments has outstanding properties like:

- good UV exposure stability
- excellent weather and light fastness
- perfect alkali-acid-resistance
- high heat stability

For this reason, they feature prime performance in terms of:

- chemical & thermal stability
- UV opacity
- hiding power
- infra-red (IR) reflectivity



Different field application

Successfully used in different sectors where light and heat resistance are required:

Architecture



Taylor Made Solutions

CICPs pigments are available in a range of different shades of color, but also can be **specifically formulated on request**.

Inco has always developed specific **Taylor Made Solutions** for its customers. Making it one of our company's first key values.

Our customers' happiness is always our first priority.

Technical-Commercial Assistance

The R&D and the technical-commercial assistance departments always work synergetically to create high-technical-aesthetic featuring products.

Inco follows its customers throughout all the aesthetic-development process of its products. In addition, Inco fine-tunes its development and industrial performance. Supporting not only technical development but also the aesthetic standpoint of innovative products from high-added value.

Inco Worldwide

Manufacturing and distribution worldwide branch locations

Inco Industria Colori has production facilities in **Italy** (Headquarters), **India**, **Russia** and distribution systems in many countries.

It offers global technical, commercial, and graphic assistance that enables us to support and serve customers in **over 35 countries worldwide**.



• Italian site

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Russian site

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Indian site

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