

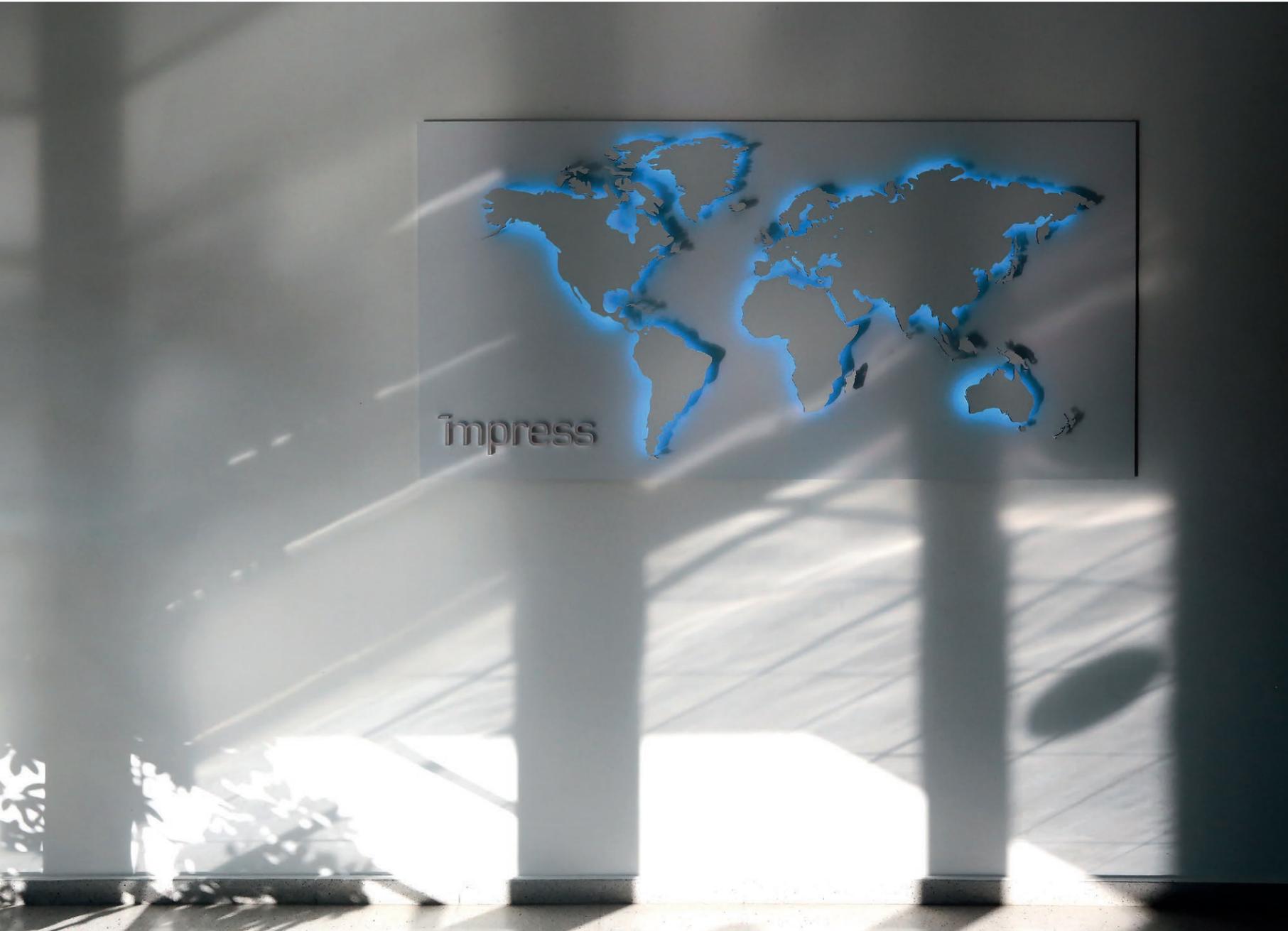


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COLORFUL

INKS & PIGMENTS SERIES

impress
THE DECOR COMPANY



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impress Group

Into the future with tradition

The name impress stands for a successful, globally operating group that develops and manufactures trend-oriented wood-based panel decorative surfaces for the furniture and laminate flooring industries. The group's product portfolio includes printed decorative paper, impregnated paper, finish foil, inks and additives. In addition to creative demands, technical innovation and outstanding product quality play a decisive role at impress.

With more than 85 years of experience within the sector, impress has gained lasting confidence from its customers due to a high degree of flexibility, agility, and profound vision and expertise in making business decisions. The basis for the impress group's enduring success is its ability to work together with partners in the market to use innovative technologies to develop design-oriented products.



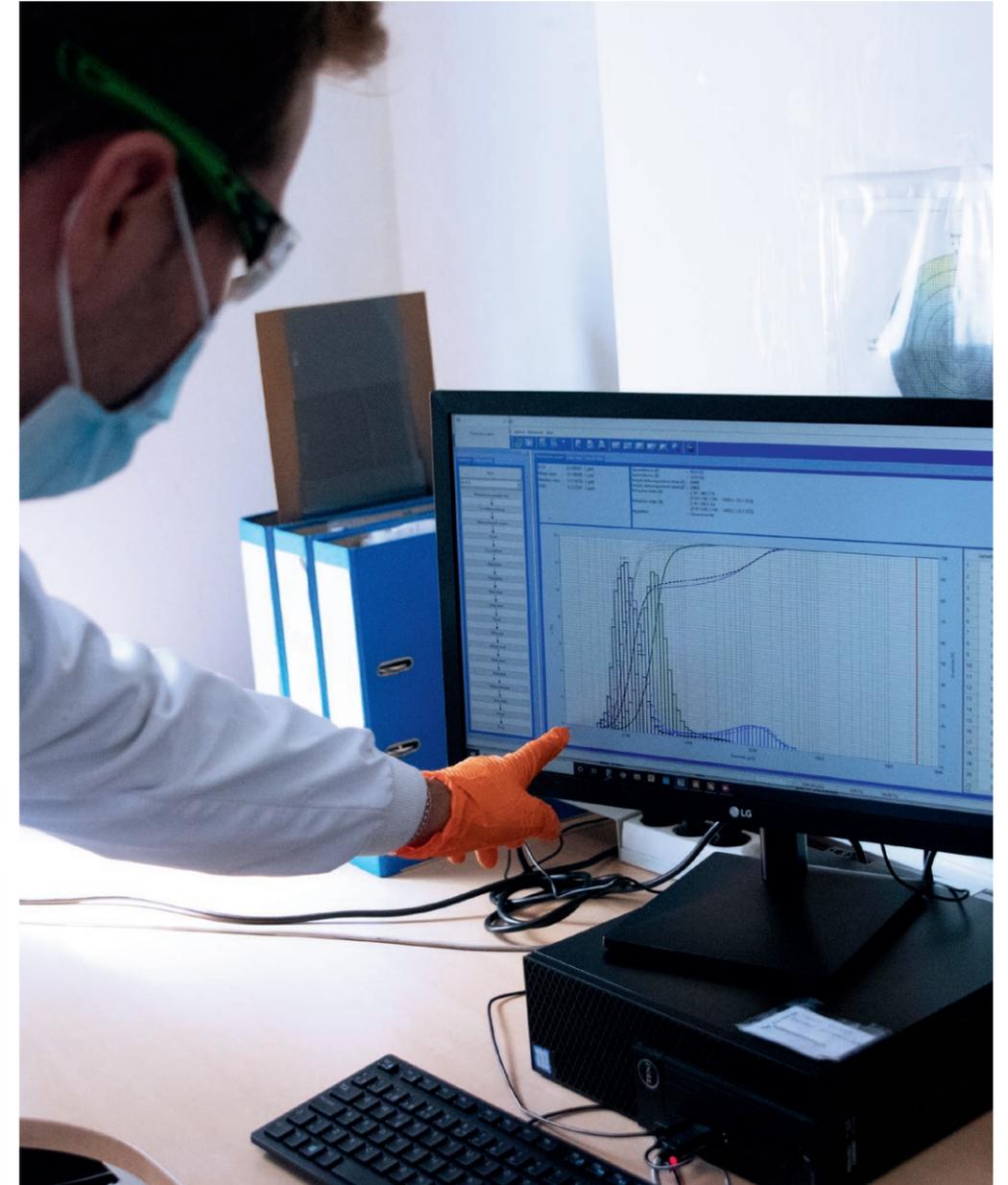
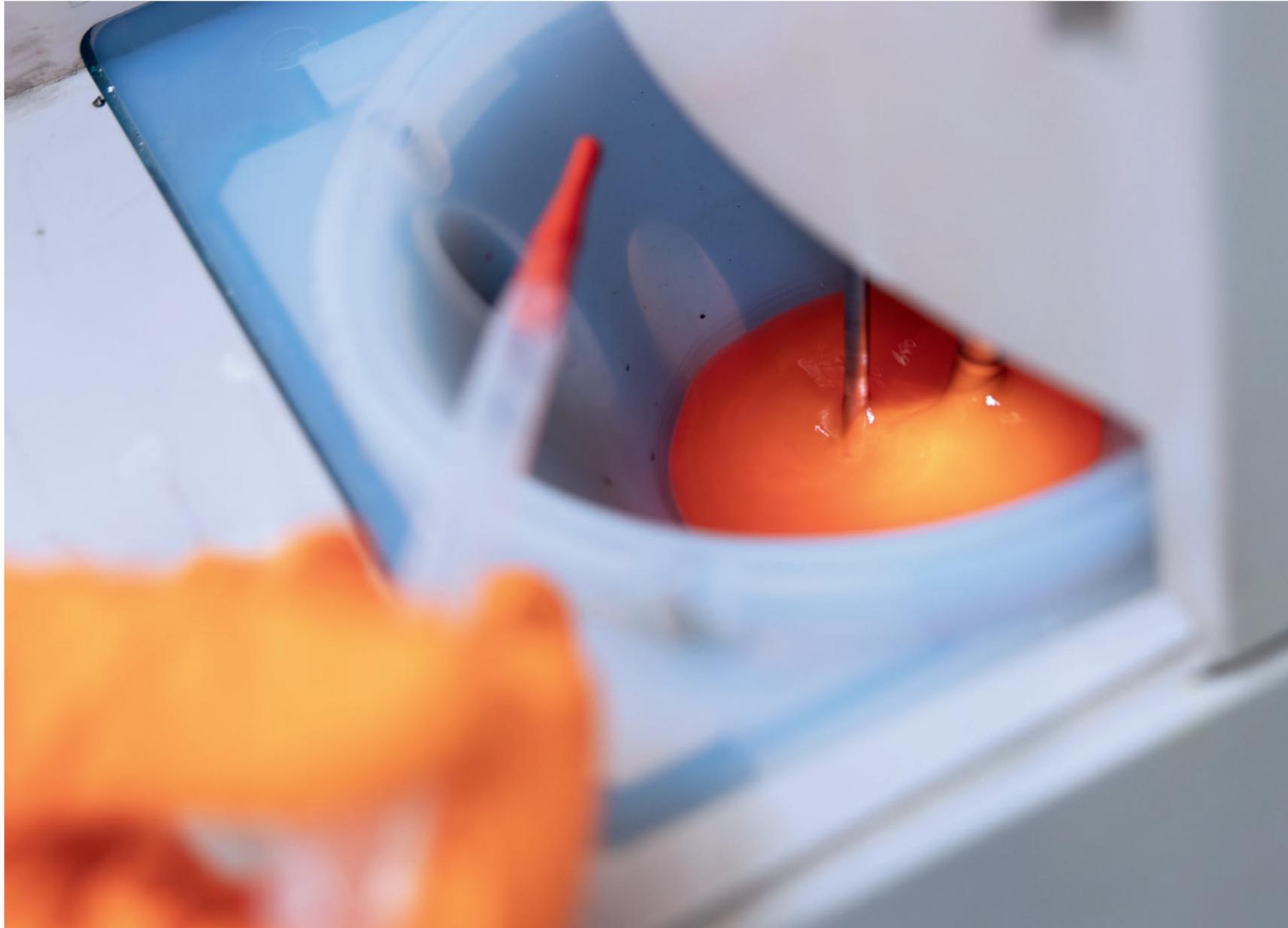
Even during the early years, internationalization was the declared objective of the company founders. Today, the worldwide locations guarantee excellent service for customers, which makes them the ideal platform for a future-oriented, strategic partnership with globally operating companies. The emphasis: for impress, the transfer of know-how, service quality, security of supply, process partnerships and a high willingness to invest mean an intense focus on future technologies and guaranty the production of high-quality products.

At impress, product development is one of the essential process steps with a partnership-based customer approach and a direct exchange of competencies. Throughout the history of impress, the group has always critically analyzed and improved upon the status quo. The continuous improvement process (CIP) is an essential part of the company's philosophy, which is applied to both internal processes and to the interfaces to upstream suppliers and customers. This has resulted in new ways of thinking and structures that sustainably enrich the corporate culture and ensure that the company is able to self-confidently look towards the future of the dynamic market of wood-based panel decorative surfaces.

01

INTRODUCING IMPRESS INKS COMPETENCE CENTER





Inks Competence Center

For more than 25 years near Barcelona, Spain, impress has been specializing in producing inks, lacquers, and extenders. These products proudly serve a variety of needs in decorative paper printing, edge banding, furniture manufacturing, paper impregnation and paper mills.

A powerful R&D team mainly formed by chemists specialized in different disciplines, provide a technological knowledge that goes beyond the chemistry and behind the formulations.

Our inks and pigment dispersions show a spectacular behavior either in printing, impregnation, or coloring.

During all these years, impress has been investing in process technology and particularly in R&D facilities. These investments give a high added value intended to the goods manufactured which in turn has positioned impress as a leader company in its sector.

impress is represented in various countries by their production sites, sales offices, and agents, selling their products in competitive markets like Europe, Asia, America, or the Middle East.

impress inks

impress has many years of experience in the production of printed decorative paper and possesses “the know how” regarding all important quality factors in the field of inks production. Additionally, we have developed a new range of inks and extenders of high efficiency and improved quality.

Succinctly, this expertise covers the following:

- decorative paper for impregnation
- pre-impregnated papers (finish foil)
- high pressure and low-pressure lamination

Other advantages that impress can offer:

- High intensity
- Fast impregnation
- Optimum stability at low and high speeds
- Low bleeding
- Optimum lightfastness
- High heat stability
- Low Volatile Organic Compounds (VOC) content
- Extensive experience with global customers
- Prompt delivery of inks

Our packaging options:

- Plastic drum: 25 kg, 200 kg
- IBC 1000 kg



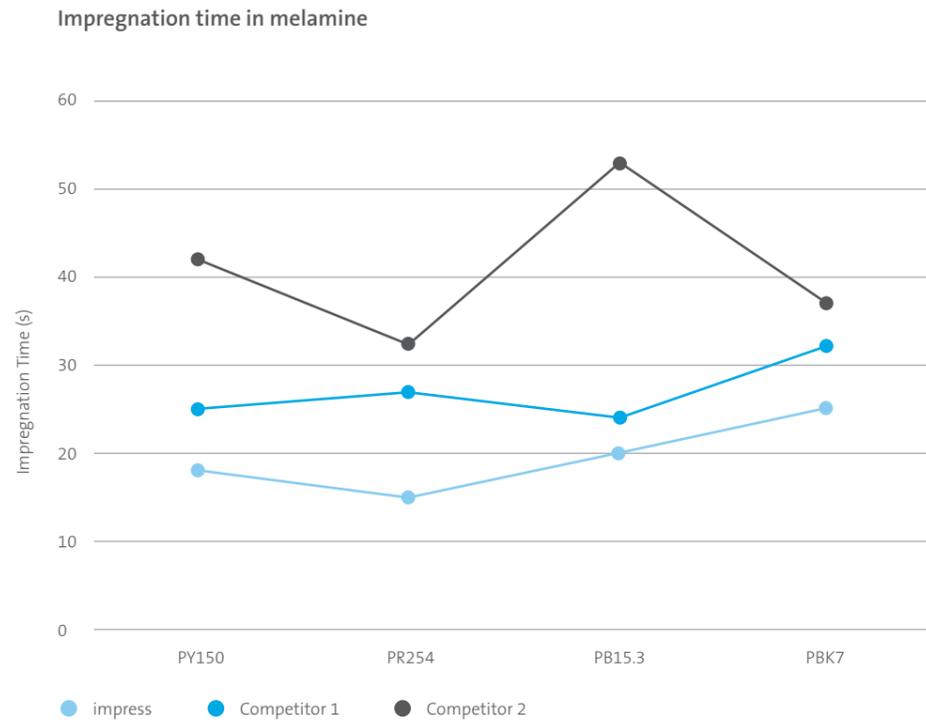
Inks Product Range

PRODUCT NAME	COLOR SHADE	COLOR INDEX	LIGHTFASTNESS (blue wool scale)	APPLICATION
INK ORW ORGANIC WHITE 3198 DP	 White	PW 6	8	Decorative Paper
INK ORW ORGANIC WHITE 3199 FF	 White	PW 6	8	Pre-impregnated Paper
INK ORY ORGANIC YELLOW 3130	 Yellow	PY 150	7	Decorative and pre-impregnated paper
INK FEY FERRIC OXIDE YELLOW 3960	 Yellow	PY 42	8	Decorative and pre-impregnated paper
INK ORY ORGANIC YELLOW 3181	 Yellow	PY 181	7-8	Decorative and pre-impregnated paper
INK ORO ORGANIC ORANGE 3291	 Orange	PR 242	6-7	Decorative and pre-impregnated paper
INK ORR ORGANIC RED 3254	 Red	PR 254	7-8	Decorative and pre-impregnated paper
INK ORM ORGANIC MAGENTA 3719	 Red	PR 176	6-7	Decorative and pre-impregnated paper
INK LRR LIGHT RESIST F/E 3757	 Red	PR 122	7-8	Decorative and pre-impregnated paper
INK FER FERRIC OXIDE RED 3911	 Red	PR 101	8	Decorative and pre-impregnated paper
INK ORC ORGANIC CYAN 3679	 Blue	PB 15.3	7	Decorative and pre-impregnated paper
INK ORC ORGANIC BLACK 3318 LC	 Black	PBK 7	8	Decorative and pre-impregnated paper
INK MEP METALLIC PEARLESCENT DPM 0332	 Silver	-	7	Decorative Paper

PRODUCT NAME	APPLICATION
CONC EXT SYNTHETIC EXTENDER 3881	Decorative and pre-impregnated paper
EXT EXC EXTENDER CONC 5800	Decorative paper application. Especially recommended for HPL
PRIMER 3502 PP/PE	Printing on treated Polyolefin and PET substrates

Impregnation time

Impress Inks show incredible results compared with our main competitors. Fast impregnation time is one of the best characteristics. Graph 1



Graph 1

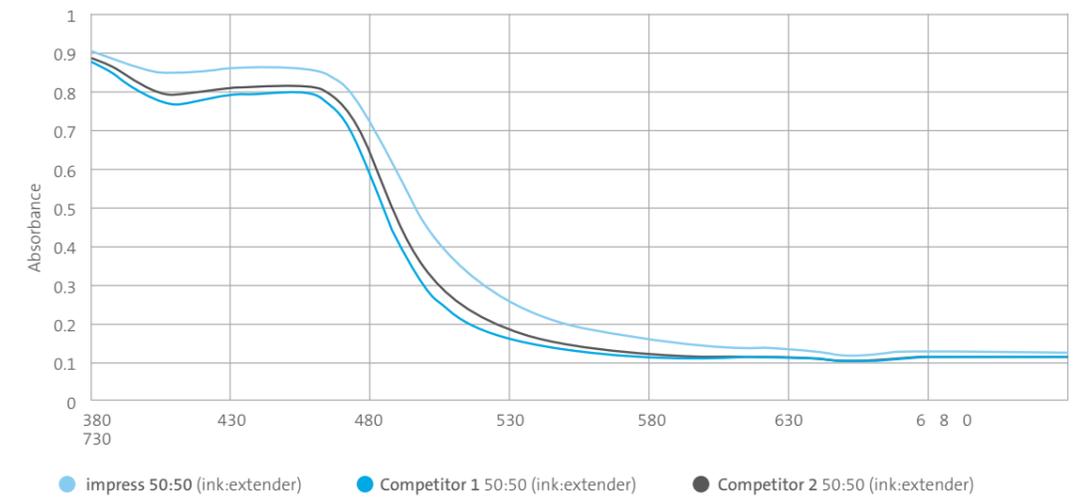
Intensity

The relative intensity of the impress inks vs the competition is shown in the Table 1:

PIGMENT	IMPRESS	COMPETITOR 1	COMPETITOR 2
PY150	100%	38.7%	54.4%
PR254	100%	54.5%	61.8%
PB15.3	100%	52.2%	57.7%
PBK7	100%	91.0%	94.2%

Table 1

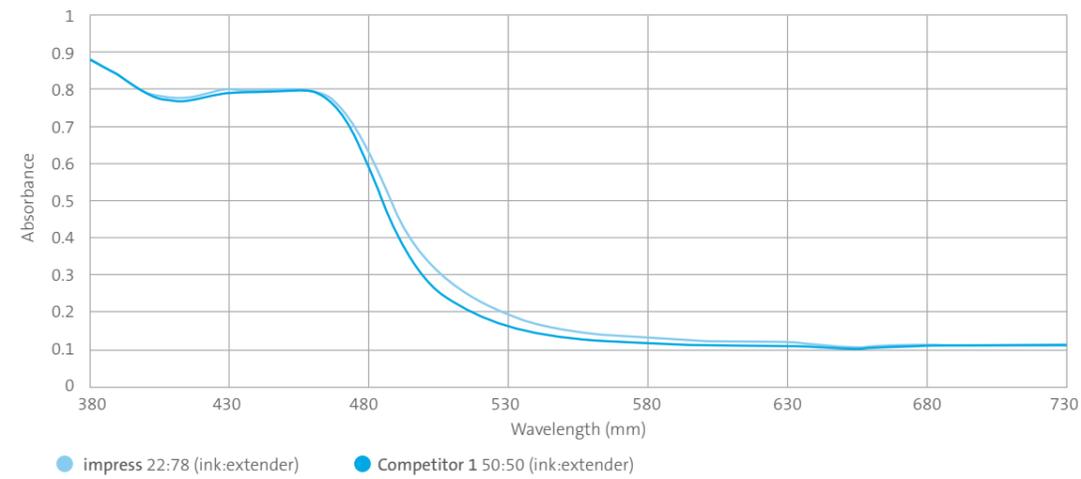
In the graphs 2, 3 and 4 it is represented the absorption curves of different dilutions of the material INK ORY ORGANIC YELLOW 3130 (PY150) vs a dilution of 50% yellow ink and 50% diluting extender. Higher intensity and ink saving are observed for the impress ink vs the competition.



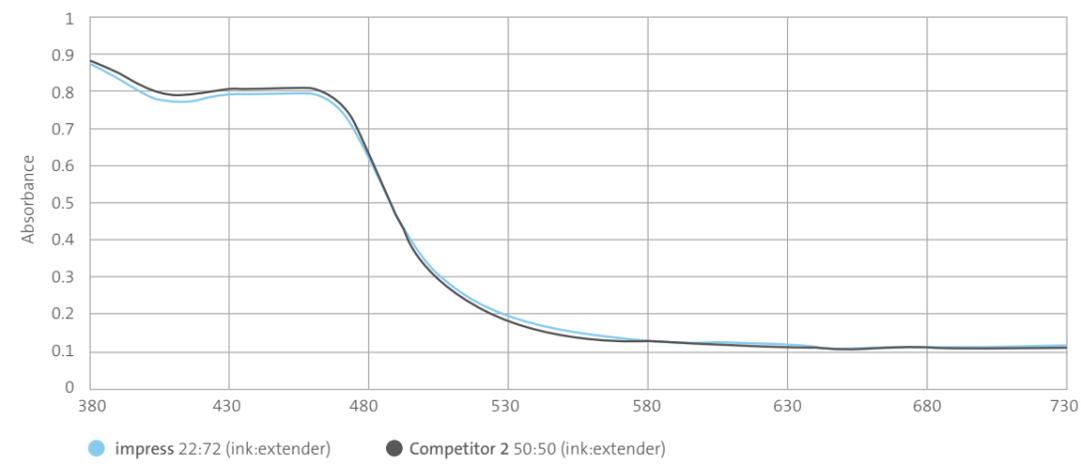
Graph 2

When compared at the same conditions, impress ink is showing the higher absorbance, that means higher color intensity.

In graphs 3 and 4 the color intensities have been equaled to the competition with diluting extender. The result is a saving of ink reaching the same color intensity.

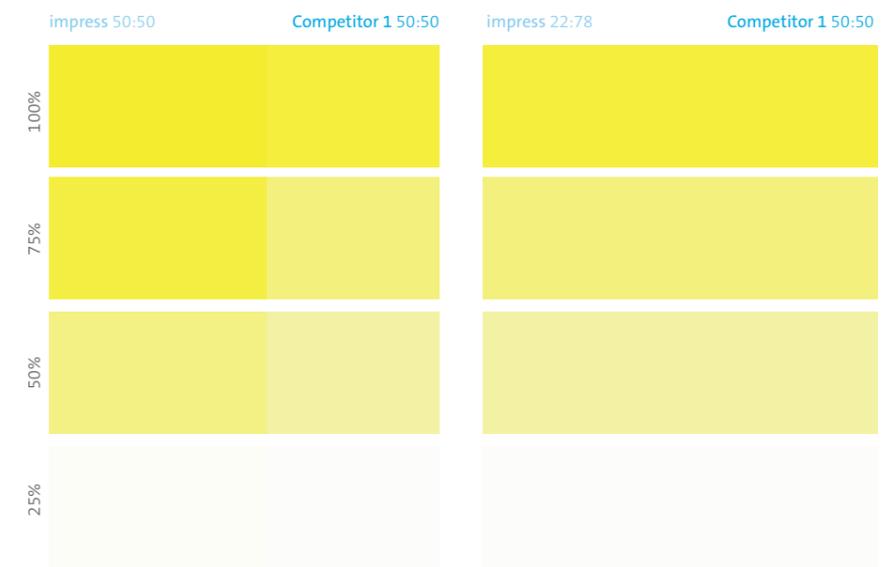


Graph 3



Graph 4

In the pictures A and B it is shown the colour shade of the impress INK ORY ORGANIC YELLOW 3130 vs the competition.



Picture A



Picture B



Pigment
Dispersions

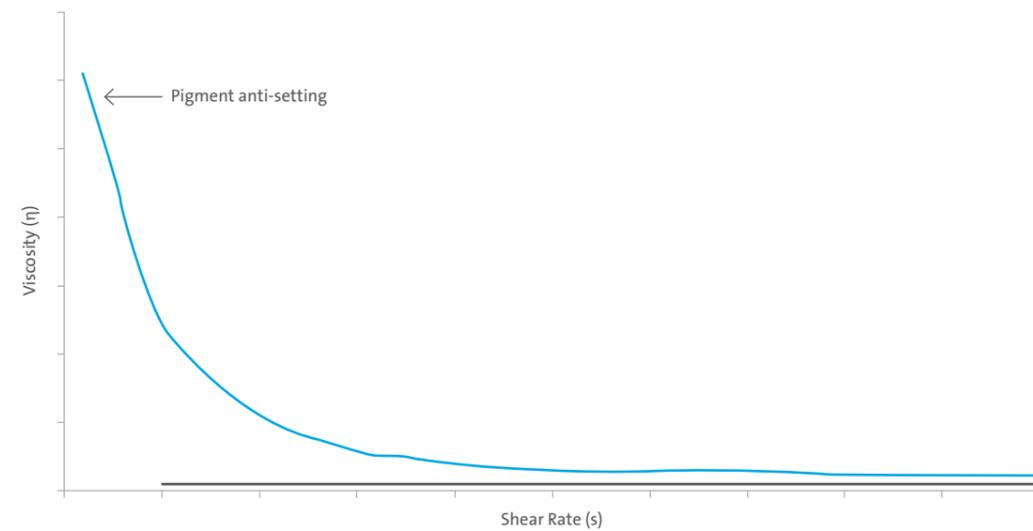
02

impress pigment dispersions

Impress has been producing pigment dispersion for many years under the former Tabercolor trademark. Our pigment dispersion can be used in a wide range of applications:

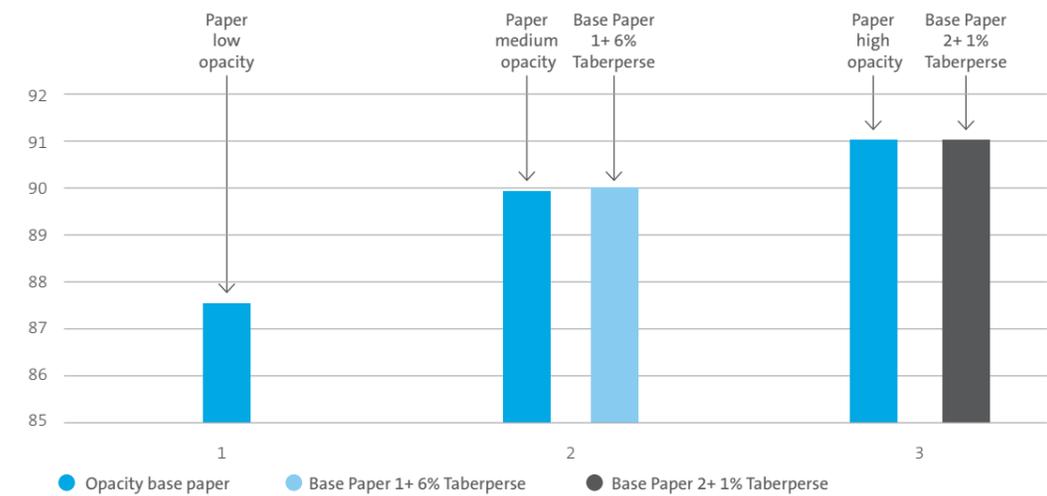
- Colour pigment dispersions for decorative paper mills.
- White dispersions for the pigmentation of urea and melamine resins in impregnation.
- Colour pigment dispersions for colouring: paper, adhesives, concrete, plaster, latex, chipboards, MDF, HDF, etc...
- Intermediate dispersion for inks production.

The importance of particle size of the pigment dispersion or the choice of additives is not only reflected in the colour but also in the stability. A good example of this is thixotropy where the liquid has a high viscosity preventing the dispersed particles from being deposited while it is static, but when a physical force is applied, the viscosity decreases allowing the liquid to easily flow. Graph 5.



Graph 5

All our white dispersions show this behaviour. This is very important because our white dispersions are high pigmented, reaching a solid content of 75% with good fluidity (very important for handling process) and no settling during storage. Our white dispersions, provide excellent opacity in impregnation. See graph 6.



Graph 6: The use of low opacity paper in combination with 6% of our Taberperse White 1080, provides the same opacity as a medium paper opacity. When impregnating a medium opacity paper with 1% of Taberperse 1080 we can achieve the same opacity as a high opacity paper.

The explained in the Graph 6 results in production cost saving in the production of white impregnated sheets, as we can achieve high opacity with more economical base paper.

In addition, thanks to the extensive background in colorimetry and dispersion, our R & D department can achieve any shade and opacity of white you require for your application.



A step forward

For the colored pigment dispersions, it is necessary to secure the quality by means of a lab sheet former. Without “state of the art” equipment it is no longer possible to play a leading role in this industry. This was the main reason why we decided to invest and take a step forward to lead this sector.



In our quest for continuous improvement and pursuit of excellence in customer service, impress is in the position to offer all our customers and industry professionals any color, shade, and intensity they may need with the higher quality.

Our laboratory, thanks to our highly trained technical staff and latest technologies, can cover any need for product development that the customer can request according to the standards of the paper industry.

Tabersperse

Description

Tabersperse is a binder free pigment dispersion manufactured without using alkyl phenol ethoxylated (APEO) additives and volatile organic compounds (VOC-free).

Characteristics

- Binder free
- APEO and solvent free (VOC < 1%) advised for certified paints
- High concentration of pigment
- Perfect compatibility

Special Features

- Binder free

Product Series

- Standard Waterbased Tabersperse
- Indirect food contact Tabersperse
- White Impregnation Tabersperse

Applications

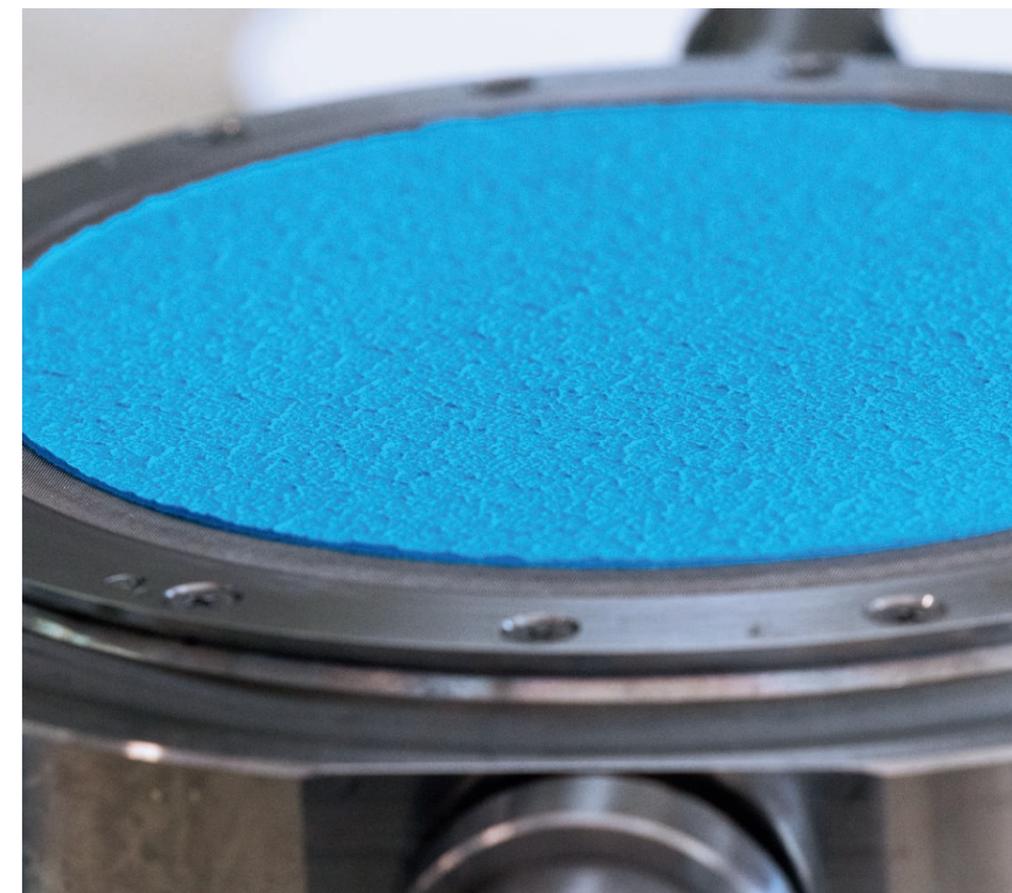
Decorative paint, Ink, Varnish, Paper, Adhesive, Concrete, Latex, Plaster, decorative paper...

Packaging

- Plastic drum: 25 kg, 200 kg
- IBC 1000 kg

Product Advantages

- High rutile titanium dioxide content – this mineral possesses the highest known refractive index of any known substance, and so provides a high-quality coverage and dense even opacity
- Low viscosity – addition of the pigments should not cause a significant or adverse increase in a resin formulation's viscosity
- Low VOC (Volatile Organic Compound) content – therefore no issue with emissions from the impregnation dryers
- Good colloidal stability – for a typical resin formulation
- Some light-moderate stirring is always recommended though
- Pigmentation with Levelling Effect – When combined with impress wetting agents, the pigmented resin formulation will have good self-levelling properties regarding the surface film, resulting in an even better appearance



Tabersperse Product Range

PRODUCT NAME	COLOR SHADE	COLOR INDEX	Form	APPLICATION
TABERSPERSE WHITE 1070	 White Yellowish	PW 6	Paste	Decorative paint, Ink, Varnish, Paper, Adhesive, Concrete, Latex, Plaster, decorative paper...
TABERSPERSE WHITE 1080	 White Blueish	PW 6	Paste	
TABERSPERSE YELLOW 1146	 Yellow	PY 150	Liquid	
TABERSPERSE YELLOW 1130	 Yellow	PY 109	Liquid	
TABERSPERSE YELLOW 1131	 Yellow	PY 110	Liquid	
TABERSPERSE ORANGE 1595	 Orange	PO 72	Paste	
TABERSPERSE VIOLET 1251	 Violet	PV 19	Liquid	
TABERSPERSE RED 1293	 Red	PR 242	Paste	
TABERSPERSE RED 1234	 Red	PV 19	Liquid	
TABERSPERSE RED 1721	 Red	PR 176	Paste	
TABERSPERSE RED 1214	 Red	PR 214	Paste	
TABERSPERSE BLUE 1199	 Blue	PB 15.3	Paste	
TABERSPERSE BLACK 1180	 Black	PBK 7	Liquid	
TABERSPERSE BLACK 1180FC	 Black	PBK 7	Liquid	



Storage and
handling

03

Storage and handling

Impress Inks and Pigment Series products will provide optimum results when stored and handled properly. The storage and handling practices in this document are required to ensure the performance, quality, and shelf life of the product.

Storage Guidelines:

Impress Inks and Pigments Series products must be stored in a clean and dry area with temperatures between 10-30°C. Direct contact with sunlight must be avoided. The product must be stored in its original closed container.

Handling Guidelines:

Impress Ink and Pigments Series products must be stirred before use in its original container until reach a homogeneous state. The product must be as well stirred prior to pour out. Stirring is also required prior to repackaging into smaller containers.

If settling occurred in stored product and sediment accumulates at the bottom of the container, then stir the product until no sediment remains.

Shelf life:

If the product is handled and stored under the listed conditions, the quality, performance, and properties will keep unaltered for 6 months.

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Impress makes no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency, or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Impress products for its application.

*Nothing included in this information waives any of Impress General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Impress products, are available upon request and are provided in compliance with applicable law. You should read and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact Impress.





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