

GLOBAL PIGMENTS POWERHOUSE COLOR YOUR COATINGS



YOUR GLOBAL PIGMENTS POWERHOUSE INNOVATION, ATTENTION TO CUSTOMER NEEDS AND RELIABILITY

The new Heubach is a leading global supplier of **comprehensive color solutions** featuring technology, manufacturing and quality leadership across a complete portfolio of organic, inorganic, and anticorrosive pigments, pigment preparations, dyes and specialty materials.



The New Heubach Group is a leading global manufacturer of organic, inorganic and anticorrosive pigments with a focus on new application technologies and sustainability.

Our reputation for quality and commitment to innovation in all the pigments, pigment preparations and dyes we manufacture is unparalleled in the coatings industry. Heubach can deliver impactful solutions, no matter the scale of your project or business, and quickly turn your innovations into reality, positively impacting your people, your profitability, and our planet.

The Heubach name is synonymous with innovation, attention to customer needs and reliability in creating colors. Our customers benefit from one of the world's most complete portfolios of organic, inorganic, and anticorrosive pigments, pigment preparations, dyes and specialty materials. An extensive knowledge of our markets and expertise in research and development enable

future-oriented innovative solutions for our customers in the coatings industry, enabling them to deliver advanced, sustainable products where color contributes to brand and value.

For more than 200 years the Heubach companies have been known for their experience in chemistry, innovation, excellence in pigments and attention to customer service. Our team of pigment experts around the world sets industry standards, provide practical solutions, and deliver innovative products to accelerate your projects and future growth.

With our extensive product portfolio, advanced technologies, global manufacturing sites and secure supply chains, we deliver best-in-class and sustainable color solutions to brighten the lives of everyone, wherever they are.

OUR PRODUCTS - PIGMENTS AND PIGMENT PREPARATIONS FROM THE EXPERTS



ORGANIC PIGMENTS

Heubach offers a complete range of organic pigments for the coatings industry, suitable for practically every end-use application. From more economical to high-performance customer requirements, Heubach's continuous research and development efforts have defined industry standards in terms of quality, performance, and technical support. Our extensive product portfolio includes: Phthalocyanine Blues and Greens, Azo Yellows, Oranges and Reds, Indanthrone Blues, Isoindoline Yellows, Benzimidazolone, Anthanthrone, DPP & Quinacridone Reds.



ANTICORROSIVE PIGMENTS

As the global leader in the replacement of carcinogenic chrome-based anticorrosives Heubach pioneered the use of standard zinc phosphates. To address the limitations in matching the excellent performance of chromates, Heubach introduced advanced product lines such as modified orthophosphates, polyphosphates, the wide spectrum anticorrosives (WSA), organic inhibitors and flush rust inhibitors resulting in a complete modular system. The innovative energy fueling this process is reflected in four product lines, which satisfy the full spectrum of modern protective coatings requirements.



INORGANIC PIGMENTS

Complex inorganic color pigments are considered the most stable class of pigments developed by the color industry and Heubach's comprehensive portfolio is engineered to satisfy the highest demands for heat stability, chemical inertness as well as weather and light fastness. Products in our range include: Nickel and ChromeRutile Yellows, Spinel Blue, Black and Green as well as Hematite Brown pigments are available in a large variety of color shades. The Bismuth Vanadate pigments combine the outstanding fastness properties of an inorganic pigment with a unique high chroma, greenish yellow color shade.



HYBRID PIGMENTS

Developed by Heubach, our hybrid pigments are coreshell-pigments manufactured by a co-finishing process that combines an inorganic pigment core with a shell of high-performance organic pigments resulting in a pigment preparation with excellent fastness and chromaticity properties. The combined advantages of inorganic and organic pigments enable short grind times, high pigment loads and superior hiding power in combination with high brilliance especially in the challenging yellow-orange-red range of the color space.



PIGMENT PREPARATIONS

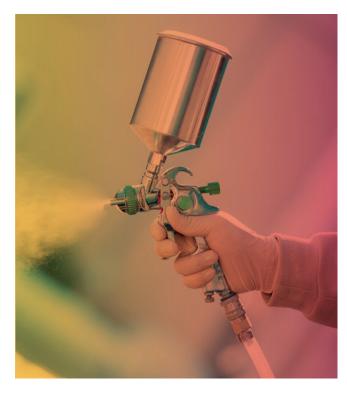
Heubach's backwards integration in organic and inorganic pigments manufacturing connects our global footprint of high-performance pigments to downstream processing of preparations for the coatings and other industries. The results for our customers are more economical pigment preparations with greater quality control.

Our liquid and solid pigment preparations offer solutions to meet the specific requirements of virtually every type of coating. From the highest durability required for automotive and decorative coatings or the highest opacity needed in industrial coatings to dye-like transparency for metallics and glass coatings, Heubach has solutions for water- and solvent-borne or radiation-cured coatings, designed for optimal compatibility, stability and consistency.

Heucosin, Heubach's range of dry pigment preparations, are ready-to-use customized multi-pigment preparations pre-dispersed and adjusted to the most frequently used shades. All grades exhibit universal processing characteristics and can easily be dispersed in most common binder systems.



Heubach's broad portfolio, from high performance to economical organic pigments, meets the exacting demands of the Automotive, Decorative, Industrial and Wood Coatings Industries. As a reliable partner, we have established a flexible worldwide production network that is actively committed to environmental protection and safety in all activities.





HOSTAPERM®

Hostaperm grade organic pigments represent the highest possible light and weathering fastness properties offered by Heubach and include the following chemistries: Benzimidazolone, Quinacridone, Perinone, Anthanthrone, Perylene, Phthalocyanine, Triphendioxazine, and DPP. They are suitable for use in automotive, industrial, and decorative paints.

NOVOPERM®

Novoperm pigment types offer good to excellent weather fastness, good solvent fastness and high heat resistance. They are widely used to replace both lead or other heavy metal based inorganic pigments and are suitable - depending on the grade - for use in the paint industry when the pigments must meet special requirements. Opaque grades (70 types) show improved weathering in deeper shades and are also available in the Hostaperm, Permanent and Hansa portfolios.

VYNAMON™

The Vynamon range is specifically designed for the coloration of plastics for masterbatch, sheets, fibre as well as engineering plastics and powder coatings. All of the products provide optimized coloristic, dispersion and fastness properties and can be used in a wide variety of applications. Heubach provides a complete organic product portfolio for plastics and powder coatings with high performance products including Pigment Blue 60, Pigment Yellow 180, Pigment Yellow 183, Pigment Red 122 and Pigment Red 254.

MONOLITE"/ MONASTRAL"*

The Monolite / Monastral portfolio comprises a wide range of organic pigments for coating systems including automotive OEM and refinish, decorative coatings, and high-end industrial applications such as coil coatings. The high-performance grades such as Pigment Blue 60, Pigment Green 36, Pigment Red 168, Pigment Red 254 and Pigment Red 264 provide excellent recoat ability and exhibit excellent solvent, weather, and light fastness.

*Monastral pigments are not available in the United States.

PERMANENT

Permanent pigments are suitable for lower end coatings and are generally good for baking systems. They exhibit relatively good fastness to solvents and over painting. However, opacity, rheological properties, and weather fastness are relatively lower. Because of their high tinctorial strength, good gloss and largely good light fastness Permanent pigments are typically used in industrial and decorative paint systems.

HANSA® AND DALAMAR®

Hansa and Dalamar types have good to very good weather fastness and when compared to other chemistries are relatively lower in cost. These pigments demonstrate good rheological properties and give a good cost-to-performance ratio in decorative and industrial paints.

^{*}Monastral pigments are not available in the United States.





INORGANIC PIGMENTS

Heubach's range of high-performance inorganic pigments offers solutions for the most demanding coatings applications such as coil coatings, powder coatings, industrial coatings and architectural coatings. They meet the highest standards of heat resistance and chemical inertness as well as weather and light fastness.

HEUCODUR®

The Heucodur products are complex inorganic color pigments and thus belong to the most stable class of pigments developed. They satisfy the highest demands for heat stability and chemical inertness as well as weather and light fastness. Our product range includes Nickel and Chrome Rutiles, Cobalt Blue and Green Spinels, Black Spinels as well as Hematite Brown.

VANADUR®

The Vanadur products are green shade Bismuth Vanadate pigments with outstanding application properties like improved opacity, high gloss, excellent weather and light fastness and good tinting strength. They are easily dispersed and are suitable in both solvent– and waterborne systems, including aqueous dispersions. For improved application properties like extreme heat resistance and improved acid, alkali and $\rm SO_2$ resistance and light / UV resistance, Heubach also offers an encapsulated Bismuth Vanadate.



HYBRID PIGMENTS

High-performance organic and inorganic pigments differ significantly with respect to their surface characteristics, specific weights and performance in terms of hiding power, brilliance and weathering stabilities. The hybrid morphology technology in Heubach's solution to these problems combines the advantages of both pigment classes into a singular hybrid pigment product.

TICO®

Tico hybrid pigments are high-performance yellow, orange and red pigment preparations, manufactured by a proprietary co-finishing process to attach the organic pigments to the surface of titanium carrier pigments. The resulting products develop full color saturation, high gloss, low dusting and are easy to disperse. The outstanding properties of Tico pigments cannot be achieved with the common mixtures of organic high-performance pigments with white/yellow titanium or bismuth vanadate pigments. The Tico technology allows significantly shorter grinding times more comparable to that of pure inorganic pigments with lower risk of overgrinding or color shift. As compared to straight blends, oil absorption can be greatly decreased allowing for higher pigment loading in colorant pastes.







As a pioneer in developing alternatives to carcinogenic chrome-based anticorrosives, Heubach has a broad range of solutions for preventing the effects of corrosion. What started with zinc phosphate found its continuation in our orthophosphates, polyphosphates, modified silicas, wide spectrum anticorrosives, organic inhibitor and flash rust inhibitors which are now the basis for modern effective protective coatings. Heubach offers a wide range of universal anticorrosive that significantly extend the life of steel and reduce costs over the long term.





MODIFIED ORTHOPHOSPHATES

The modified orthophosphates are a milestone in chrome-free anticorrosive pigments. Heucophos ZPA, ZPO and ZMP belong to this group and significantly improve efficiency compared to conventional zinc phosphates. With Heucophos CMP there is also a unique zinc-free modified orthophosphate available.

HIGH-PERFORMANCE POLYPHOSPHATES

Polyphosphates are a chromate replacement for high-performance applications, such as coil coatings and aircraft primers. Heubach's high-performance polyphosphates are the preferred option wherever ultimate protection is required. In addition to Heucophos ZAPP, the range includes Heucophos SAPP, SRPP and CAPP as highly effective zinc-free polyphosphates.

MODIFIED SILICA PIGMENTS

The corrosion protection of pre-treated steel and aluminum sheets is very important. Our Heucosil products are highly effective zinc-free modified silica pigments meeting the specific performance requirements for thin-film applications and coil coating. They offer further zinc-free solutions for standard coating systems.

WSA - WIDE SPECTRUM ANTICORROSIVES

Heucophos ZAM-PLUS and ZCP-PLUS are the first chrome-free anticorrosives for universal use. These products are specially designed to meet the demands of corrosion protective coating types ranging from conventional, to high solids, waterborne and powder resins.

ORGANIC INHIBITOR

By combining modified phosphate pigments with the organic inhibitor Heucorin RZ in solvent- and waterborne coatings, a significant improvement of the anticorrosive properties is achieved. Providing early protection of the substrate, reducing the tendency to blister and improved adhesion and wet adhesion properties, increasing the long-term protection.

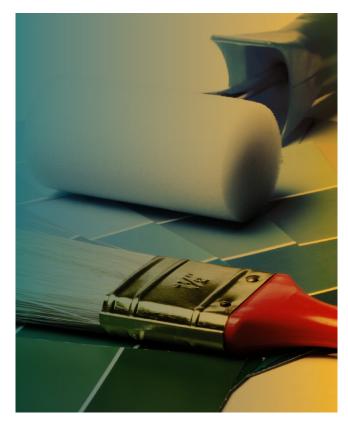
FLASH RUST INHIBITORS

The addition of the liquid flash rust inhibitors Heucoflash LQ1 and LQ2 in a water-based corrosion protection systems prevents the formation of rust spots on the surface, known as flash and early rusting caused by water migration during the gelling and curing time.



PIGMENT PREPARTIONS FOR THE COATINGS INDUSTRY

Heubach's extensive portfolio of high-performance pigment preparations (aqueous and solvent-based preparations as well as several dry preparations) for architectural & decorative, wood, and industrial coatings offer a secure way to help your business grow. Our continuous product optimization ensures compliance with global regulatory requirements as well as compatibility with the latest coatings technologies. As a trusted partner to the coatings industry, our twelve certified production plants around the globe secure the supply chain to help meet your growth plans. It takes experience to make it to the top, and as an industry-recognized leader in pigment preparations manufacturing, our global ranges can help you reach new heights.





WATER-BASED FORMULATIONS

Our global ranges, Colanyl 100, Colanyl 500, Hostatint 500, Aquis, Heucotint W and Heucotint UN are designed for decorative interior and exterior coatings and plasters. The ranges provide benefits from optimized rheological profiles and excellent stability to settling and skinning. Colanyl 500, Hostatint 500, Heucotint W and Heucotint UN are especially accurate and reliable when used in automatic and manual dispensers and are specifically designed for low VOC products. The complete portfolio includes a broad selection of inorganic pigments, which makes it especially suitable for high demanding facade applications. The Hostafine colorants are finely ground preparations for highly transparent coatings, such as glass and wood coatings or special effect coatings on plastics.

SOLVENT-BASED FORMULATIONS

Hostatint 500, Hostatint A 100, Hostatint SA, Hostatint SI, Licosperse and Solutint are Heubach's pigment preparations with good compatibility in all major solvent-based industrial paint systems, Narrow specifications of shade and color strength allow highly consistent paint production for both manual and automatic dispensing. Hostatint SA, Licosperse and Hostanol HW 30 are especially developed for wood coatings, delivering durable and transparent shades. Hostatint A 100-ST are super-transparent pigment preparations ideal for formulating transparent, as well as metallic and mineral effect shades.

UV-CURABLE COATINGS

Hostatint UV 100 is a range of pigment preparations designed for highly technical UV- or electron beam cured coatings systems. They provide excellent pigment-wetting by using reactive dispersants and a polymeric binder (polyetheracrylate) that is fully compatible with common UV systems in the market (polyether-, epoxy-, polyure-thane- and polyester acrylate).

DRY PREPARATIONS

Heubach's dry pigment preparations for coatings, Heucosin and Heucofit LR, are ready to use mixtures of inorganic and/or organic pigments combined with an extender and can be used in a variety of applications. The color shades of Heucofit LR products are designed as a direct replacement for lead chromate pigments and exhibit brilliant, clean color shade and excellent opacity. The Heucosin products are available in ready-made RAL shades or can be tailor-made color shades and are primarily used in industrial applications. The Heucosin Special dry preparations are designed to meet the requirements of thick film systems like polymer floor coatings where floating and flooding can be a concern.

PREPARATIONS FOR COATINGS:

GLOBAL / EUROPE

Aquis

Colanyl 100

Colanyl 500

Heucofit LR

Heucosin

Heucosin Special

Heucotint UN

Heucotint W

Hostafine

Hostanol HW 30

Hostatint 500

Hostatint A 100

Hostatint A 100-ST

Hostatint SA

Hostatint SI

Hostatint UV 100

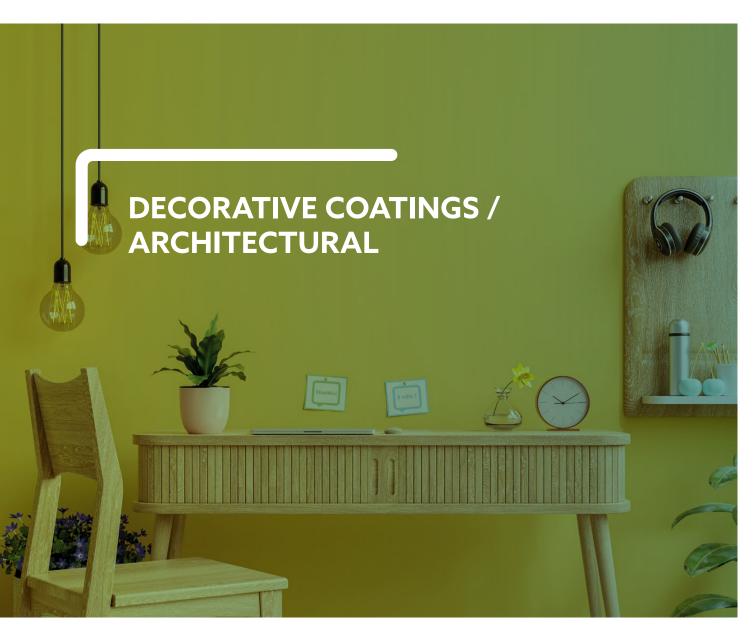
Licosperse

REGIONAL

CC Fine Paste (Asia)

Hostatint AU (North America)

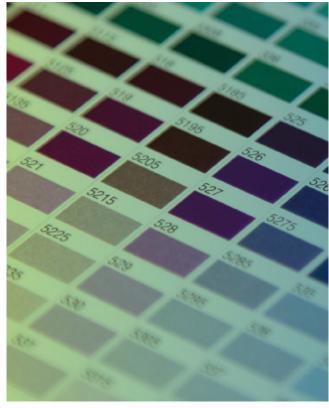
Solutint (Latin America)



Heubach's expansive pigment and preparation portfolio offers manufacturers a complete range of solutions for all types of interior and exterior architectural coatings, from general purpose to high performance grades. Our next generation pigments for water- and solvent-based applications are easily dispersible, do not require milling, and offer an economical alternative to in-house manufacturing of colorants. Our low VOC pigment preparations improve operational efficiencies and capacity utilization while at the same time reducing the overall cost of pigment usage for Point of Sale and in-plant applications.



SCAN HERE to learn more about our complete portfolio for Decorative Coatings



AQUISTM

The highly concentrated Aquis colorants exhibit optimized rheological properties and combine outstanding colorimetric demands with the highest cost effectiveness. The specially designed pigment to surfactant ratio leads to a broad degree of compatibility resulting in the ability to use Aquis colorants in water-based systems such as decorative coatings as well as specialized industrial applications. Aquis colorants can also be used in specialty applications such as latex, paper mass coloring, seed and fertilizer treatment and coloring of viscose fibers.

HEUCOTINT™ W

The outstanding performance of the Heucotint W series sets the benchmark for a wide range of applications. It is specifically tailored for coloring water based decorative and architectural paints and coatings. The product range is designed to offer high color strength with excellent fastness properties and includes a broad selection of inorganic pigments, which are especially suitable for demanding facade applications.

COLANYL® 500 AND COLANYL® 100

Colanyl 500 and Colanyl 100 are ranges of aqueous, binder free pigment preparations that are based on non-ionic and/or anionic wetting and dispersing agents. They are manufactured without using alkyl phenol ethoxylated (APEO) additives. The Colanyl 100 range contains volatile organic compounds (VOC), whereas Colanyl 500 are compatible with water-based low VOC decorative coatings. Both ranges contain a wide selection of inorganic pigments, particularly recommended for exterior applications. All Colanyl 500 are compatible in all proportions with each other, as are all Colanyl 100.

*Monastral pigments are not available in the United States.



PIGMENTS FOR DECORATIVE COATINGS:

Hansa

Heucodur

Hostaperm

Monolite / Monastral*

Novoperm

Permanent

Vanadur

PREPARATIONS FOR DECORATIVE COATINGS:

GLOBAL / EUROPE

Aquis

Colanyl 100

Colanyl 500

Heucofit LR

Heucotint UN

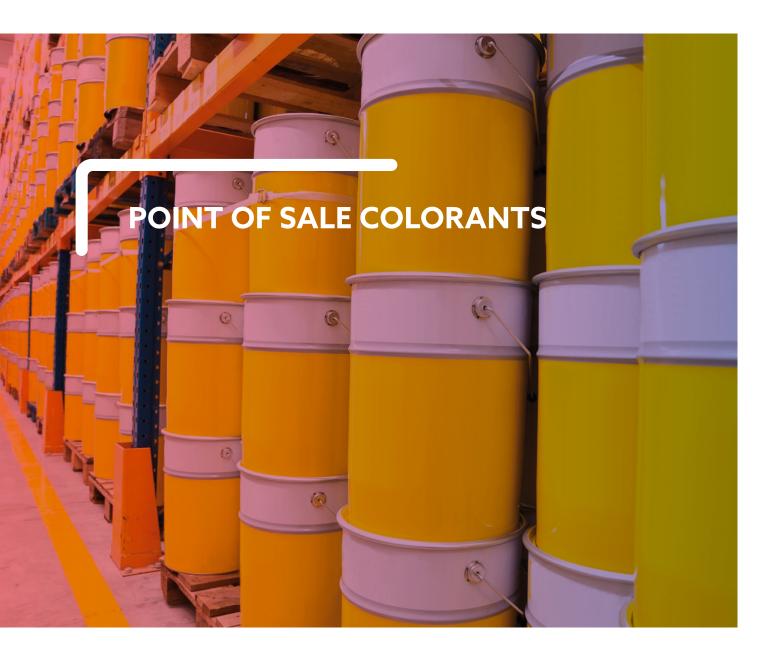
Heucotint W

Hostatint 500

Hostatint A 100

REGIONAL

Hostatint AU (North America)



Heubach offers a wide range of pigment pastes for inplant and POS applications providing full compatibility with market leading systems, including water- as well as solvent-based paints. Comprising both organic and inorganic pigments, the Heubach colorant product lines and tinting systems provide the full spectrum of colors in uncompromising quality. Opacity, light and weather fastness, shade, accuracy, reproducibility, strength and rheological properties are based on Heubach's high product quality and production standards.

Heubach's tailored tinting systems offer everything required for trouble-free in-plant tinting and paint preparation at the point-of-sale including a full range of pigment pastes, color metrics and consultancy on equipment such as software and dispensers. Complete freedom and peace of mind are provided by easy access to Heubach expertise and technical support.



SCAN HERE to learn more about our complete portfolio for Point of Sale Colorants

COLANYL® 500

Colanyl 500 is an APEO-free range of aqueous, binder-free pigment preparations that are compatible with water-based and low VOC decorative paint systems. The rheological profile allows excellent accuracy and reliability when dosing in automatic and manual dispensers as well as easy incorporation into base paints. Furthermore, processing of Colanyl 500 preparations is facilitated by their excellent stability to settling and skinning.

HEUCOTINT™ UN

Heucotint UN is our universal POS range for water- and solvent-borne decorative paints. Our comprehensive service packages for POS software and equipment support allow comfortable and time saving installation of economic and technically advanced POS tinting systems. Additionally, all colorants provide optimized solutions for the new generations of high solid alkyds with improved application performance. All colorants are machine-dispensable (POS, IPT) and are formulated by using our advanced proprietary surfactant package resulting in superior compatibility in base paints.

HOSTATINT® 500

Hostatint 500 is a range of binder-free pigment preparation and manufactured without using ethoxylated alkyl phenol (APEO) additives. These multipurpose preparations are compatible with water-based low VOC decorative coatings and solvent-based decorative coatings. When used in manual or automatic dispensers, these multipurpose pigment preparations show excellent accuracy and reliability when being poured or pumped.



▶ PREPARATIONS FOR POINT OF SALE:

GLOBAL / EUROPE

Aquis

Colanyl 100

Colanyl 500

Hostatint A 100

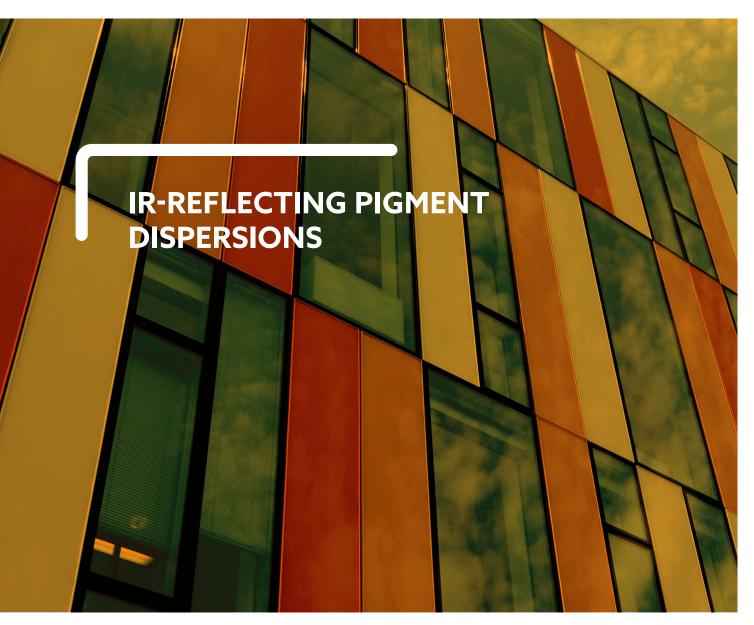
Hostatint 500

Heucotint UN

Heucotint W

REGIONAL

Hostatint AU (North America)



Dark surfaces absorb more sunlight than lighter surfaces and can heat up almost immediately. The target of modern IR-reflective pigments is to maximize the solar reflectivity of a coated surface and to minimize heat absorption and its negative effects on the substrate.

IR-reflectance is achieved by the physical backscattering of radiation through the pigment particles. Solar radiation comprises not only the visible spectrum of wavelength range (400 to 700 nm), but also the ultraviolet UV (< 400 nm) and near infrared NIR (700 to 2500 nm). NIR dominates the overall irradiated solar energy by more than 50 percent. This property can be defined as Total Solar Reflectance (TSR) in 250 nm–2500 nm.



Most inorganic pigments have intrinsic properties which contribute to IR-reflectance. Therefore, it is important to choose pigments with a higher TSR value to optimize heat reflection performance.

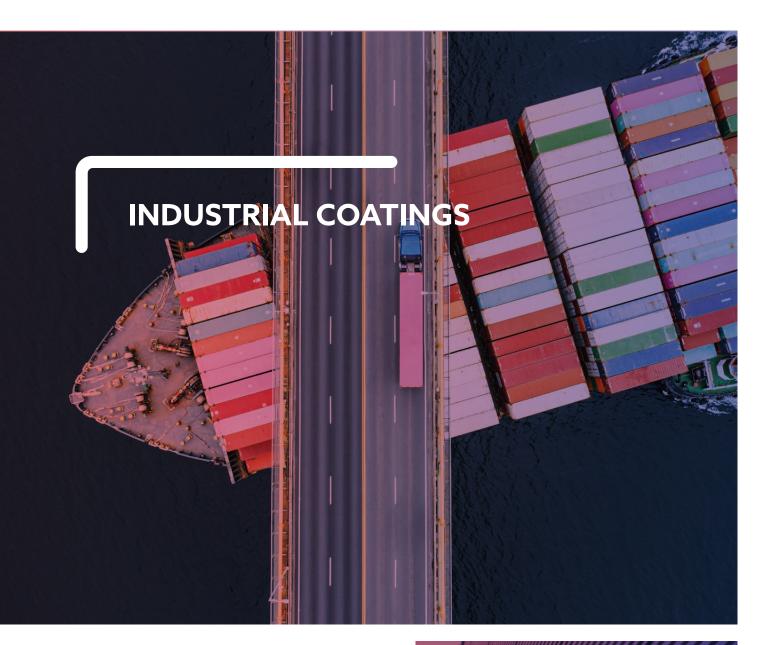
The most significant results can be achieved by replacing iron oxide black or carbon black with optimized IR-reflecting Pigment Green 17, which coloristically behaves like a traditional black. Heubach makes this available as a ready to use aqueous pigment preparation, known as Colanyl Oxide Black IR 531.

Heubach utilizes the IR-reflecting benefits of Colanyl Oxide Black IR 531 to providing a full complementary range of additional pigment preparations suitable for exterior façades.

EXAMPLES OF IR-REFLECTING PIGMENT PREPARATIONS

PY 184	Colanyl Oxide Yellow BV 531
PBr 24	Colanyl Oxide Yellow CR 531
PY 42	Colanyl Oxide Yellow R 532
PR 168	Colanyl Scarlet GO 532
PR 101	Colanyl Oxide Red G 531
PR 101	Colanyl Oxide Red B 531
PB 28	Colanyl Oxide Blue COR 531
PG 50	Colanyl Oxide Green CO 532
PG 17	Hostatint Oxide Green G 531
PBk 26	Hostatint Oxide Black B 532
PG 17	Colanyl Oxide Black IR 531
PW 6	Colanyl White R 530





Heubach offers a complete range of pigments and preparations for all types of Industrial Coatings applications, from general purpose to high performance. The established "70" grade pigments represent the industry standard for lead-free formulations and are characterized by high opacity and excellent rheology.



SCAN HERE to learn more about our complete portfolio for Industrial Coatings



HEUCOSIN™

Heucosin are customized multi-pigment preparations which are predispersed and adjusted to the most frequently used shades. All grades exhibit universal processing characteristics and can easily be dispersed in most common binder systems. HEUCOSIN™ pigment preparations not only exhibit very good light and weather fastness but also excellent resistance to solvents, acids and alkalis. Additionally, they are adjusted to all kinds of required fastness and resistance properties,

HOSTATINT® A 100

The Hostatint A 100 pigment preparations are based on an aldehyde carrier resin which was developed especially for industrial paint applications. The preparations are produced to narrow tolerances of shade and color strength allowing highly consistent paint production for both manual and automatic dispensing. The solvent and additives employed were specifically chosen to avoid hazardous labeling or special storage conditions associated with flammability. All Hostatint A 100 products show good compatibility and can be added to many types of solvent-based paint systems.

*Monastral pigments are not available in the United States.



HOSTATINT® SI

Hostatint SI, for solvent-based systems, is formulated for unparalleled compatibility, best-in-class rheology, and is a coloristic match to industry standards. Compatibility is one of the key advantages of the range as all Hostatint SI colorants are drop-in ready for minimal calibration of your current portfolio. The broad range of base chemistries supported, ensures any variability or variety of customer tint bases has been considered in the engineering of the Hostatint SI platform. All Hostatint SI colorants can help optimize manufacturing costs and maximize color performance in the most demanding industrial coating applications.

PIGMENTS FOR INDUSTRIAL COATINGS:

Hansa

Heucodur

Hostaperm

Monolite / Monastral*

Novoperm

Permanent

Tico

Vanadur

ANTICORROSIVE PIGMENTS FOR INDUSTIAL COATINGS:

Heucoflash

Heucophos

Heucorin

Heucosil

PREPARATIONS FOR INDUSTRIAL COATINGS:

GLOBAL / EUROPE

Aquis

Heucofit LR

Heucosin

Hostatint 500

Hostatint A 100

Hostatint A 100-ST

Hostatint UV 100

REGIONAL

Solutint (Latin America)



Heubach provides an extensive range of organic and inorganic pigments for powder coating applications with colors that stand up to modern processing needs, while adhering to strict global regulatory requirements. As a sustainable and economical option for the coatings industry, Heubach's pigments for powder coatings offer durability and vibrant color and are engineered for the most demanding applications, resulting in long lasting performance. Heubach also offers anticorrosion pigments for powder coatings to improve the protection of metal surfaces.



SCAN HERE to learn more about our complete portfolio for Powder Coatings



HOSTAPERM®

Hostaperm grade organic pigments represent the highest possible light and weathering fastness properties offered by Heubach and include the following chemistries: Benzimidazolone, Quinacridone, Perinone, Anthanthrone, Perylene, Phthalocyanine, Triphendioxazine, and DPP.

NOVOPERM®

Novoperm pigment types offer good to excellent weather fastness, good solvent fastness and high heat resistance. They are widely used to replace both lead or other heavy metal based inorganic pigments.



VYNAMON™

The Vynamon range is specifically designed for the coloration of plastics, such as those used in powder coatings. All the products provide optimized coloristic, dispersion and fastness properties and can be used in a wide variety of applications.

PERMANENT

This group comprises of pigments that vary in fastness properties. Because of their high tinctorial strength, good gloss and largely good light fastness Permanent pigments are used in industrial and decorative paint systems.

*Monastral pigments are not available in the United States.





COIL COATINGS

Complex inorganic pigments from Heubach are designed to satisfy the highest demands for heat stability and chemical inertness as well as weather- and light fastness. When taking account of the ecological aspects of the end product, they are the ideal choice for coil coatings.

HEUCODUR®

The unique fastness properties of Heucodur pigments are directly related to high-temperature processing (above 800 °C /1500 °F), which yields homogeneous crystalline complex inorganic color pigment compounds. The high-temperature process demands precise control over the chemical and technical parameters in the production of Heucodur pigments. By accurately controlling particle morphology and particle size distribution, the result is increased color strength and improved hiding power, as well as enhanced dispersibility in various formulated systems.

■ PIGMENTS FOR COIL COATINGS:

Heucodur

Hostaperm

Monolite / Monastral*

Tico

Vanadur

ANTICORROSIVE PIGMENTS FOR COIL COATINGS:

Heucophos

Heucorin

Heucosil

^{*}Monastral pigments are not available in the United States.

FLOOR COATINGS

Solutions for virtually every type of floor coatings system. Heubach adds color to the most demanding applications such as thick film polymers, epoxies, and UV-curable systems.

HEUCOSIN™ Special

The Heucosin Special products are ready-to-use pigment preparations which are pre-dispersed and adjusted to the most commonly used RAL shades. All grades exhibit universal processing characteristics and can easily be dispersed in solvent-free EP, PU, PMMA systems and waterborne EP formulations. They are designed for exterior use and exhibit very good light and weather fastness as well as excellent resistance to solvents, acids and alkalines.

PIGMENTS FOR FLOOR COATINGS:

Hansa

Hostaperm

Novoperm

Permanent

PREPARATIONS FOR FLOOR COATINGS:

GLOBAL / EUROPE

Colanyl 100

Colanyl 500

Heucosin Special

Hostatint A 100

Hostatint 500

Hostatint SI

Hostatint UV 100

REGIONAL

Hostatint AU (North America)





Heubach offers a full range of zinc containing as well as zinc-free anticorrosive pigments covering a variety of requirements in protective coatings, from early rust to long-term protection. Based on decades of experience, Heubach can offer the right corrosion protection solutions for a wide range of applications.



SCAN HERE to learn more about our complete portfolio for Corrosion Protection



HEUCOPHOS®

The Heucophos portfolio offers a wide range of modified Orthophosphates, high-performance Polyphosphates and Wide Spectrum Anticorrosives, including several zinc-free alternatives. While each modified Orthophosphate shows optimum corrosion protection in a limited number of binders, the WSA can be used universally. The organic / inorganic synergies between Heucorin RZ and Heucophos results in an additional improvement of the anticorrosion effect even at low dosages and drops formulation costs.

HEUCOSILTM

In addition to Heucosil CTF, a zinc-free calcium modified silica gel, Heubach offers aluminum and magnesium modified silica ion-exchange pigments Heucosil CSA and CSM, a new generation of anticorrosive pigments for the coil coating market. Heucosil products exhibit outstanding corrosion protection performance and Heucosil CSA and CSM have significantly lower oil absorption.

ANTICORROSIVE PIGMENTS FOR CORROSION PROTECTION:

Calcium Phosphate

Heucoflash

Heucophos

Heucorin

Heucosil Zinc Phosphate





Heubach delivers color solutions to surpass not only our customers' exacting color requirements but also the demanding performance and durability expected in a multitude of applications of automotive OEM and refinish coatings.



SCAN HERE to learn more about our complete portfolio for Automotive Coatings

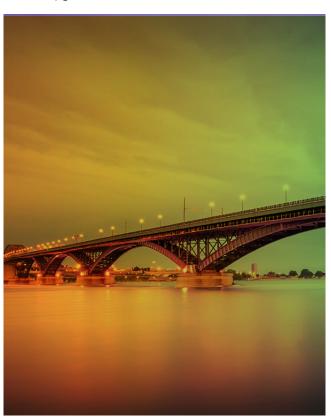


The Heubach portfolio includes many of the frequently used organic and inorganic pigments, as well as several specialty pigments which provide an enlarged color space and allow the generation of special effects.

HOSTATINT® A 100 ST

Metallic and mineral effect shades are popular for industrial applications. Our super-transparent Hostatint A 100-ST pigment preparations enhance such effects with color intensity similar to that of dyes while having very high light and weather fastness with no migration or bleeding. The Hostatint A 100-ST range is based on a widely compatible aldehyde resin and a solvent with a flash point above 100 °C, resulting in safer transportation, storage and handling.

*Monastral pigments are not available in the United States.



EXAMPLES OF HIGH-PERFORMANCE SPECIALTY PIGMENTS*

PR 179 Hostaperm Red P2GL-WDPBr 25 Hostaperm Brown HFR 01

PB 15:1 Hostaperm Blue BT 728-D / BT-729-D

PR 168 Hostaperm Scarlet GO
PY 150 Heuco Yellow 115003
PG 36 Monastral* Green 6Y-C
PR 264 Monolite Red 326401
PB 60 Monolite Blue 3RX-H

PIGMENTS FOR AUTOMOTIVE COATINGS:

Hostaperm Monolite / Monastral*

Novoperm

Tico

Vanadur

PREPARATIONS FOR AUTOMOTIVE COATINGS:

Hostatint A 100-ST

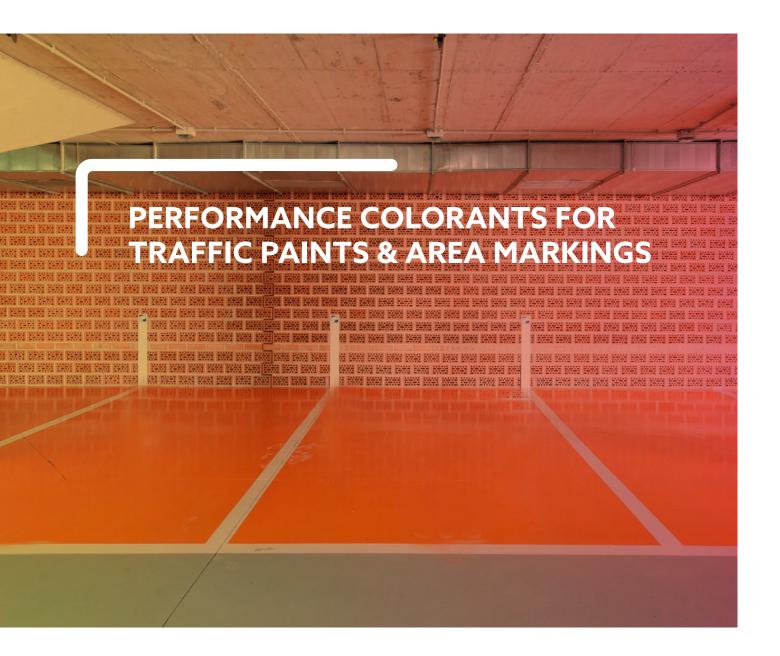
ANTICORROSIVE PIGMENTS FOR AUTOMOTIVE COATINGS:

Heucoflash

Heucophos

Heucorin

Heucosil



Area and Road Markings can be described by three general application categories:

LINE MARKINGS

While traditional lane markings, safety markings or direction indicators are typically yellow or white, additional colors are used to mark other privileged areas, such as bicycle lanes, walkways, or designated parking spaces.



SCAN HERE to learn more about our complete portfolio of Road Marking Colorants

DECORATIVE AND SAFETY MARKINGS

When used as "decorative" or "safety" markings on pavement, these are often applied over the entire surface space, so additional performance features need to be considered, such as high chroma, skid resistance, hiding power and weather fastness.

FUNCTIONAL MARKINGS

As cities become "smarter", so does the traffic, driving the need for additional signs and markings. Therefore, traffic paints must be recognizable by different automobile sensor and detection systems required for safe and efficient traffic flow. Information, such as location and speed limits, could be painted onto the road, making the intra-city navigation rely less on the GPS-based navigation system.

PRODUCTS BY APPLICATION TECHNOLOGIES:

Paint (solvent- and water-borne)

- · Lowest durability (e.g., areas with low traffic)
- Lane Markings, Decorative and Safety Markings

Hot-Melt (Thermoplastic)

- Long lasting for Lane Markings in warm climate areas
- Decorative and Safety Markings (heavy traffic areas)

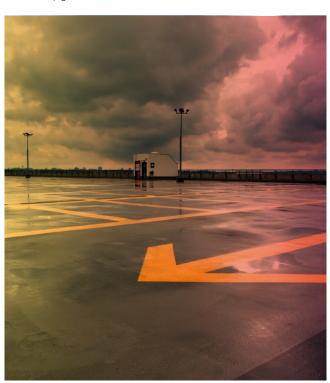
Cold Plastic ("MMA": Methyl-Methacrylate Polymers)

- Highest durability ("most robust technology")
- Decorative and Safety Markings

Epoxy Coatings

- Interior flooring applications ("economic technology")
- · Water-, solvent and 100% systems
- Area and Safety Markings

^{*}Monastral pigments are not available in the United States.



EXAMPLES OF RECOMMENDED PIGMENTS FOR TRAFFIC MARKINGS

PY 184 Hostaperm Oxide Yellow BV 02
PY 83 Novoperm Yellow HR 72
PY 65 Dalamar Yellow YT-805-D
PO 36 Novoperm Orange HL 71
PR 254 Monolite Red 325401
PBI15:3 Hostaperm Blue B2G 03

Hostaperm Green GNX 01

COLANYL® 100

PG 7

Colanyl 100 is a range of aqueous, binder free pigment preparations that are based on non-ionic and/or anionic wetting and dispersing agents. They are manufactured without using alkyl phenol ethoxylated (APEO) additives. The Colanyl 100 range contains volatile organic compounds (VOC). All Colanyl 100 are compatible in all proportions with each other. Colanyl 100 pigment preparations are a simple and convenient way to add color to any water-based road marking paint.

PRODUCTS FOR ROAD MARKINGS:

GLOBAL / EUROPE

Colanyl 100

Colanyl 500

Dalamar

Hansa

Heucofit LR

Heucosin

Hostaperm

Monolite/Monastral*

Novoperm

Tico

REGIONAL

Aquanyl YT 100 (North America)

Ecosperse (North America)



Heubach's broad range of innovative solutions enables our customers to protect wood and enhance its natural beauty. We assist our customers in the production of decorative stains and wood coatings ranging from traditional solvent-borne wood stains and clear wood finishes to environmentally conscious systems like water-based, water-miscible and UV-curable wood coatings.



SCAN HERE to learn more about our complete portfolio for Wood Coatings

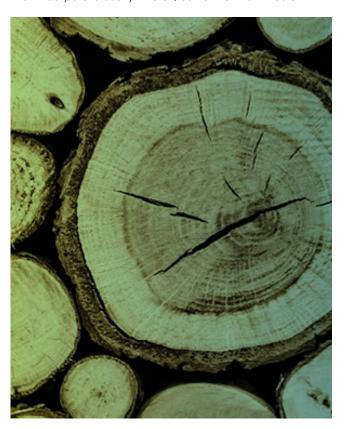


HOSTAFINE®

Hostafine pigment preparations are designed for the newest generation of transparent water-based wood stains and glazes. The complete range of organic and inorganic aqueous binder free pigment preparations are based on APEO-free non-ionic wetting agents. The ultra-fine dispersed pigments exhibit high tinting strength and brilliance with outstanding transparency and superior fastness properties as compared to dyes. The Hostafine range includes 15 low viscosity pigment preparations that can be blended for striking as well as traditional wood shades.

LICOSPERSE™

Licosperse pigment preparations are eco conscious, organic colorants suitable for solvent and oil-based applications. The mineral oil based, resin-free pigment preparations are free of lead chromates and other heavy metals and are non-toxic, non-dusting and sustainable colorants that incorporate easily into oil, solvent or wax media.



HOSTATINT® UV 100

Hostatint UV 100 is a range of pigment preparations designed for energy-cured coatings systems (UV and electron beam (EB) cured coatings). The pigments – selected from standard coatings grades – are incorporated using reactive dispersants and a polymeric binder (polyetheracrylate) that fits to common UV/EB systems in the market (polyether-, epoxy-, polyurethane- and polyester acrylate). Manufactured without the reactive Hexandiol diacrylate (HDDA) diluent, these preparations add peace of mind to the applicator for HSE considerations and in fulfilling stringent surface requirements e. g. furniture coatings. The core Hostatint UV 100 product line consists of 4 organic and 3 inorganic pigment preparations and exhibit a shelf-life of 24 months. Additional products can be made available on request.

PREPARATIONS FOR WOOD COATINGS:

GLOBAL / EUROPE

Aquis

Colanyl 100

Colanyl 500

Heucotint UN

Heucotint W

Hostafine

Hostanol HW 30

Hostatint 500

Hostatint A 100

Hostatint A 100-ST

Hostatint SA

Hostatint SI

Hostatint UV 100

Licosperse

REGIONAL

Solutint (Latin America)



HEUBACH GROUP

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