

Murasan Color

Powdered, liquid and granulated pigments.
Bring your concrete to life with colour!

EXPERTISE
ADMIXTURES & ADDITIVES



Murasan Color

Be bold, go with colour!

Have you ever envisioned concrete as more than just an utilitarian grey? What if you could transform concrete surfaces into vibrant displays of colour, adding a whole new dimension to your architectural and design projects? Our range of concrete colour pigments opens up a world of creative possibilities.

We do not just offer colour – we deliver exceptional performance. Each pigment is designed and formulated to meet the stringent requirements of the EN 12878 and is CE certified, ensuring the highest quality and reliability.

Manufactured from inorganic, synthetic metal oxides, they possess a remarkable resistance to the highly alkaline environment of cement stone as well as the harshest environmental elements. UV rays and weathering will not be able to diminish their brilliance. This translates into superior

resistance, which means your concrete will remain richly coloured for years to come.

Take the ordinary to the extraordinary with our **Murasan Color** concrete pigments! Imagine the possibilities – from simple paving stones to eye-catching architectural façades to stunningly coloured countertops. The power to transform concrete is at your fingertips. Flip through our brochure today and discover a whole new spectrum of design potential.

Key benefits at a glance



Resistance to high pH

Highly stable in alkaline environment due to inorganic nature.



UV resistance

No colour deterioration and fading over time.



Weathering resistance

Withstands weathering such as rain, temperature changes, and pollutants.

Product properties

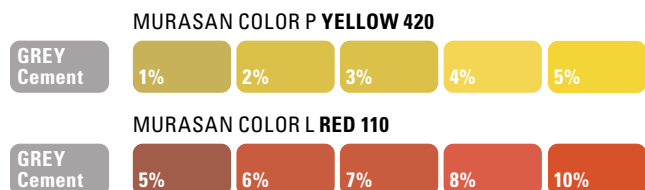
- Wide range of colour tones
- Quality and performance according to EN 12872
- Richly coloured inorganic metal oxides
- Available as powder, liquid and granulate
- Fully compatible with our range of admixtures
- With the personal touch of MC-Bauchemie



Three factors affecting the final colour

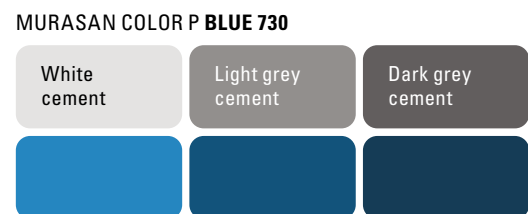
Dosage

The recommended dosage range is 1-5% for powdered and granulated pigments and 5-10% for liquid pigments. Beyond this, the incremental improvements become smaller, meaning that each increase in colour intensity becomes more and more expensive.



Cement colour

Think of a cement stone as the canvas for your coloured concrete. Just like with painting, a lighter base allows for brighter and more true-to-life final colours. To achieve the most vibrant and accurate hues, white Portland cement is your best bet. It is worth noting that other concrete components, like the fine aggregates (sand), can also have a minor influence on the final colour.



Concrete surface quality

The smoothness of the concrete surface is another important factor that contributes to the brightness of the colour. The mechanism is simple – a smooth surface reflects more of the light that hits it back to our eyes. This makes us perceive it as brighter. Coarse surfaces absorb some of the photons, making it appear darker.

Compaction

Using a great compaction aid or plasticizing admixture is a first step on the path to a smooth surface. These products make it easy for the fine cement paste to spread throughout the concrete, filling all the gaps and pores.

Efflorescence

These salty deposits discolour the surface, making darkly pigmented concrete in particular to appear dull and dirty. Hydrophobic admixtures reduce the tendency of water to migrate in and out of the concrete which significantly reducing the risk of efflorescence.

Curing

Concrete curing is another term for ensuring that the mixing water has enough time to react with the cement before it evaporates. Poorly hydrated cement stone means higher porosity and a greater tendency for efflorescence, leading to an ugly surface and dull colours.

Murasan Color P

Powdered Pigments

Powdered pigments are suitable for budget-conscious projects that can accommodate the extra preparation and safety measures required to handle dust and ensure even mixing.

BENEFITS

Cost-effectiveness: Powder is the basic form of concrete pigments. With no additives or extra production steps required, the value proposition is unbeatable.

Shelf life: With powdered pigments there is no need to worry about sedimentation or degradation. That is why they are ideal for situations with complex logistics.

Versatility: The easy and quick availability, smaller packaging size and very long shelf life make powdered pigments the perfect option for smaller projects and jobsite applications.

KEEP IN MIND

Fineness: The small size of powdered pigments makes them ideal for colouring concrete. Unfortunately the same property is responsible for the fact they get airborne easily and can colour other things. Don't forget to use PPE.

Handling: The finer the particle, the higher its surface energy, causing particles to stick together to minimise it. This makes powdered pigments difficult to dose, especially with automatic dosing systems. To break up these agglomerates, mix the pigment with dry aggregates for at least 60 seconds.

		RED				YELLOW	
		100	110	120	130	420	960
CEMENT	WHITE						
	GREY						
		BLACK				WHITE	
		330	350	365	772	720	
CEMENT	WHITE						
	GREY						



BROWN

610

655

686



BLUE

730

5015

GREEN

740



Murasan Color L

Liquid Pigments

Liquid pigments are ideal for projects where ease of use, colour consistency, and minimal dusting are prioritized.



BENEFITS

Easy mixing: The pigment particles in liquid pigments are already perfectly dispersed, which means you do not need to mix the concrete for as long or as intensively to achieve a strong colour.

Consistency: The less demanding and easier mixing process minimises the risk of errors and variations, ensuring uniform colours across different batches of concrete.

Convenience: The liquid form of these pigments allows for easy pumping and precise dosing using an automatic volumetric system.

Reduced dust: A significant advantage of liquid pigments is the elimination of dusting during the dosing and mixing process. This enhances worker safety and maintains a cleaner on-site environment.

KEEP IN MIND

Cost: Liquid pigments are usually slightly more expensive than powdered pigments for comparable results due to an additional manufacturing step and the addition of stabilisers, biocides or antifreeze in winter.

Storage and handling: The presence of water in liquid pigments makes them vulnerable to microbial growth and frost. Therefore they require proper storage conditions to ensure optimum shelf life and performance.

Stability: Pigments are tiny metal particles that are denser than the water in which they are dispersed. This means that even with stabilisers, liquid pigments will slowly sediment. The solution is simple – just stir the liquid once in a while.

		RED				YELLOW			
		100	110	120	130	420	430	440	920
CEMENT	WHITE								
	GREY								
		BLACK							
		320	330	340	350	351	370	820	830
CEMENT	WHITE								
	GREY								



BROWN

960

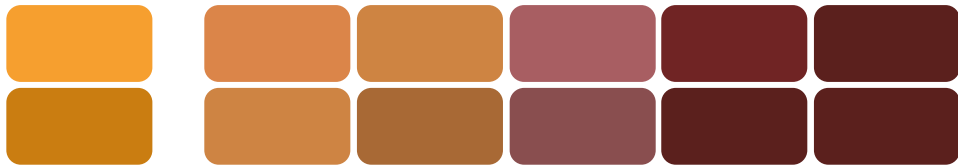
610

639

655

685

686



BLUE

730

731



WHITE

720



CREME

572

573

574



GREEN

744



PURPLE

796



Murasan Color G+

Granulated Pigments

Granulated pigments offer a middle ground, with reduced dust and ease of mixing, making them a good choice for those looking for a balance between cost and handling.

BENEFITS

Reduced dust: Granulated pigments contain no water, yet they produce significantly less dust than powdered pigments due to their larger granules, improving worker safety and environmental cleanliness.

Faster mixing: Due to the controlled size of the granules, these pigments mix more effectively than powdered pigments (although not as fast as liquid pigments). This helps to achieve a more homogeneous and consistent colour between different batches of concrete.

Easy to dose: The spherical shape of the pigment granules allows them to behave almost like a liquid, giving them a certain degree of flowability. This makes them easy to dose both manually and automatically.








Shelf life: Thanks to the absence of water, granulated pigments do not suffer from the same handling and storage sensitivity that liquid pigments do. Their logistical robustness and shelf life is basically equivalent to that of powder pigments.

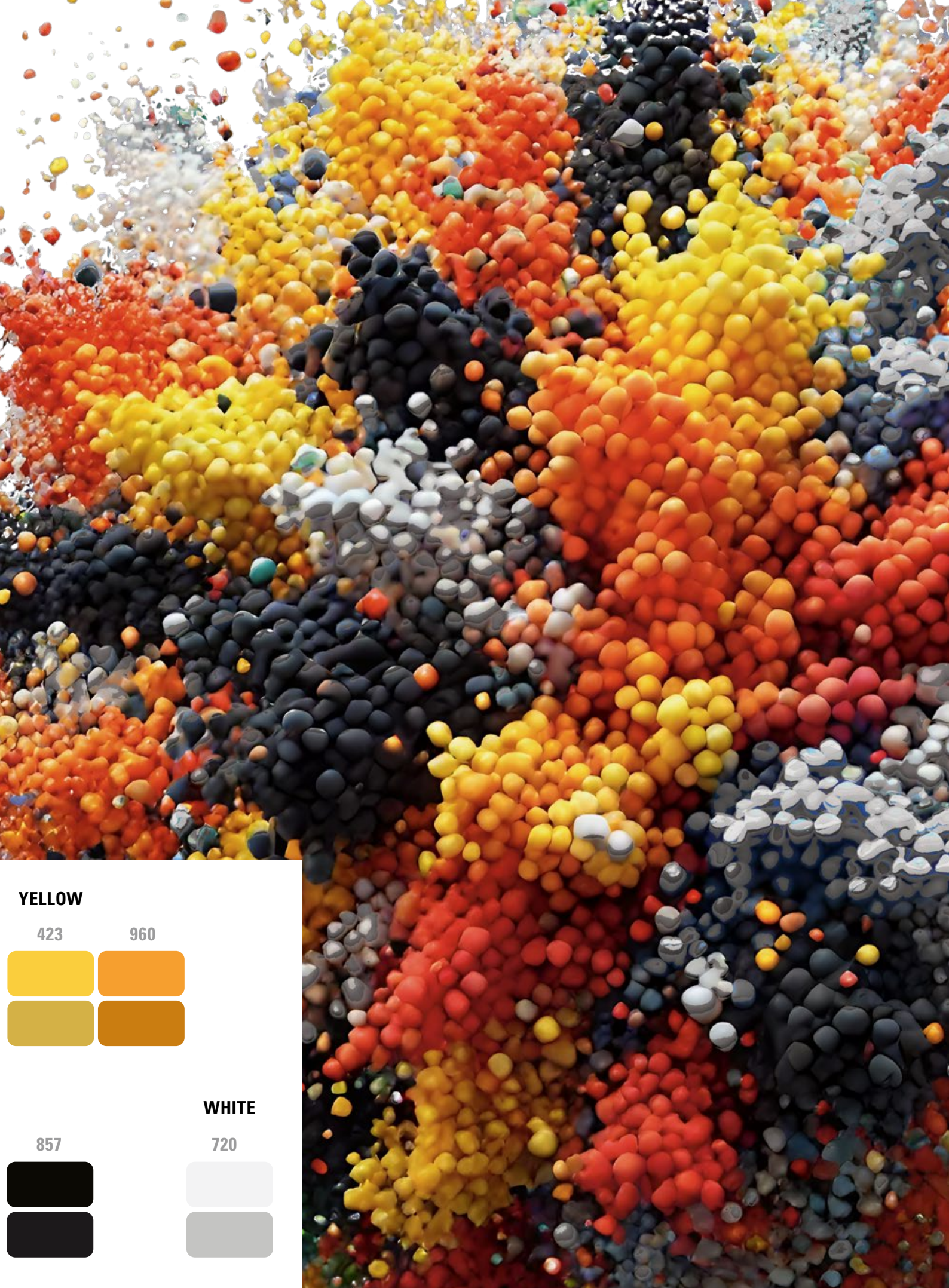
KEEP IN MIND

Cost: Although we do not need stabilisers, biocides and anti-freeze as we do with liquid pigments, granulated pigments still require a fairly complex spray-drying step in their production, which makes them slightly more expensive compared to powder pigments.

Availability: The complex production of granulated pigments results in a somewhat limited availability of colour variants. We currently offer the most common shades of black, red, yellow and white.

Storage: Even though they cannot freeze or grow micro-biological contamination, it is important to monitor storage conditions. Prevent moisture from entering the packaging to avoid granules disintegrating and forming clumps.

		RED		
		110	130	
CEMENT	WHITE			
	GREY			
		BLACK		
		330	340	853
CEMENT	WHITE			
	GREY			



YELLOW

423

960



WHITE

857

720



Important: The colours shown are for reference only. The colour tone depends on many influencing factors. Tests must be carried out before use.



Troubleshooting

Can pigmented concrete be used for both the interior and exterior?

Yes, pigmented concrete is suitable for both interior and exterior projects. It provides a durable colour that can withstand different weather conditions and foot traffic.

How long will pigmented concrete retain its colour?

Pigmented concrete can retain its colour for many years, when properly installed and maintained. Factors such as UV exposure, weathering and maintenance practices can affect the longevity of the colour.

Can I customise the colour of pigmented concrete to meet specific design requirements?

Yes, our pigments offer extensive colour customisation options. Our team can work with you to create custom shades that meet the aesthetic and design goals of your project.

Is pigmented concrete environmentally friendly?

Pigments do not have an adverse effect on the sustainability of concrete and can actually contribute to sustainable building practices due to the potential for improved durability, recyclability and reduction of the heat island effect.

How does pigmented concrete compare to traditional surface applied colourants?

Unlike surface colouring, pigmented concrete integrates the colour throughout the concrete cross-section, providing excellent colour consistency and durability over time.

Are there any special maintenance considerations for pigmented concrete surfaces?

Pigmented concrete surfaces typically require minimal maintenance. Regular cleaning with mild detergents and water and periodic resealing can help maintain colour vibrancy and prolong the life of the surface.

Are there any limitations or restrictions on the use of pigmented concrete in certain climatic conditions?

Pigmented concrete can be used in a wide range of climatic conditions, but extremes of temperature or humidity can affect curing and colour development. Proper curing methods and environmental controls can help mitigate potential problems.



FAQ

Uneven colour distribution in pigmented concrete surface:

Ensure thorough mixing of the concrete mix, especially when using powdered and granulated pigments, to achieve uniform colour dispersion. Also consider using dispersion enhancing admixtures such as plasticizers and superplasticizers.

Efflorescence (white powdery deposits) appearing on the surface of pigmented concrete, making it appear dull:

Efflorescence can occur due to moisture migration within the concrete. Good compaction, proper curing practices, hydrophobic admixtures or surface impregnation are just some of the measures that can help prevent efflorescence.

Contact our experienced technicians for more information.

Colour fading over time in pigmented concrete:

Select high quality pigments specifically formulated for outdoor exposure and UV resistance. Indoors, fading due to UV isn't a problem, but exposure to aggressive chemicals or humidity changes causing efflorescence might cause issues. Regular maintenance such as surface resealing can help prolong colour vibrancy and durability.

Discolouration caused by exposure to harsh chemicals or stains:

Clean spills or stains immediately with mild detergents and water to minimise discolouration. For stubborn stains, consult a professional for proper cleaning techniques and products compatible with pigmented concrete.

Colour variation between batches of pigmented concrete:

To minimise colour variation, ensure consistency in concrete mix design (workability) and pigment dosing between batches. Ensure that all batches are mixed for a sufficient period of time – colour testing and adjustments as required can help to achieve a consistent colour.

Excessive water absorption leading to colour distortion in pigmented concrete:

Proper curing and the use of hydrophobic admixtures in pigmented concrete can help reduce water absorption and minimise colour distortion. For even greater protection, the selection of appropriate impregnations or sealers with hydrophobic properties can further enhance colour quality and durability.

Colour inconsistency between freshly poured and cured pigmented concrete:

Allow sufficient time for freshly poured pigmented concrete to cure and fully develop its colour before comparing with cured sections. Colours can intensify or change slightly during the curing process, so good planing, consistency in production and patience are key.

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- Available as powder, liquid and granulate
- Quality and performance according to EN 12872
- Fully compatible with our range of admixtures
- With the personal touch of MC-Bauchemie

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BE SURE. BUILD SURE.

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