



Coloring of rigid PVC

HEUCOPLAST™

heubach



Coloring PVC

PVC is used in a large number of indoor and outdoor applications.

Especially rigid PVC offers a combination of fastness and processing properties with excellent cost efficiency.

Most PVC-products in the building industry are colored, either with TiO_2 or color pigments.

The producers use tailor made pigment preparations to allow an efficient production of pipes or profiles in many different colors.

These preparations often contain specially designed carrier systems that allow easy flowing and mixing of the base compounds and the colors.

HEUCOPLAST™ a PVC based powder preparation for the coloration of rigid PVC, mainly tailor made and used to tint white profiles in the customer's proprietary color.

HEUCOPLAST™

Professional shading of rigid PVC

HEUCOPLAST™ is a ready to use pigment preparation for the coloration of rigid PVC, consisting of organic and/or inorganic pigments as well as PVC powder. The color shades of the HEUCOPLAST™ grades are in most cases customer – tailored matches which have been developed with respect to the individual PVC – compound properties.



Product Properties

As opposed to most powder colorants, the preparations show good flowability and do not show a tendency to dust therefore enabling easy dosing and handling. Even direct dosing at the extruder is possible since pre-mixing is not necessary in each application. The dosage depends, of course, on the final application and required color shades, but it is usually in the range of 0.1 to 1.0 parts per hundred.

Production Process

The manufacturing process combines state-of-the-art high volume mixers and milling technology to a unique finishing procedure which allows for highest reproducibility.



Product Range

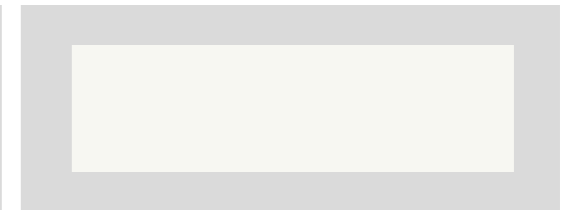
Several HEUCOPLAST™ grades have been specially developed for the shading of white window profiles. They contain a reduced pigment loading, enabling accurate dosing of even very small amounts. Particularly for this purpose black, blue and violet HEUCOPLAST™ colors are available.

Full Shade ¹⁾	HEUCOPLAST™	RAL (appr.)	Color	Light Fastness of Pigment	Base	
					organic	inorganic
	190 53 SE *	-	Yellow	7 - 8		x
	490 01 SE	-	Violet	7 - 8		x
	590 11 SE	-	Blue	7 - 8		x
	590 12 SE	-	Blue	7 - 8		x
	690 15 *	-	Green	7 - 8	x	x
	990 23	-	Black	7 - 8	x	
	990 02	-	Black	7 - 8	x	

* Further customized shades are available on demand. / ¹⁾ Full shade measured in Ca/Zn compound with 5% pigmentation.

Examples of shading in a Ca/Zn stabilized compound (6% TiO₂)

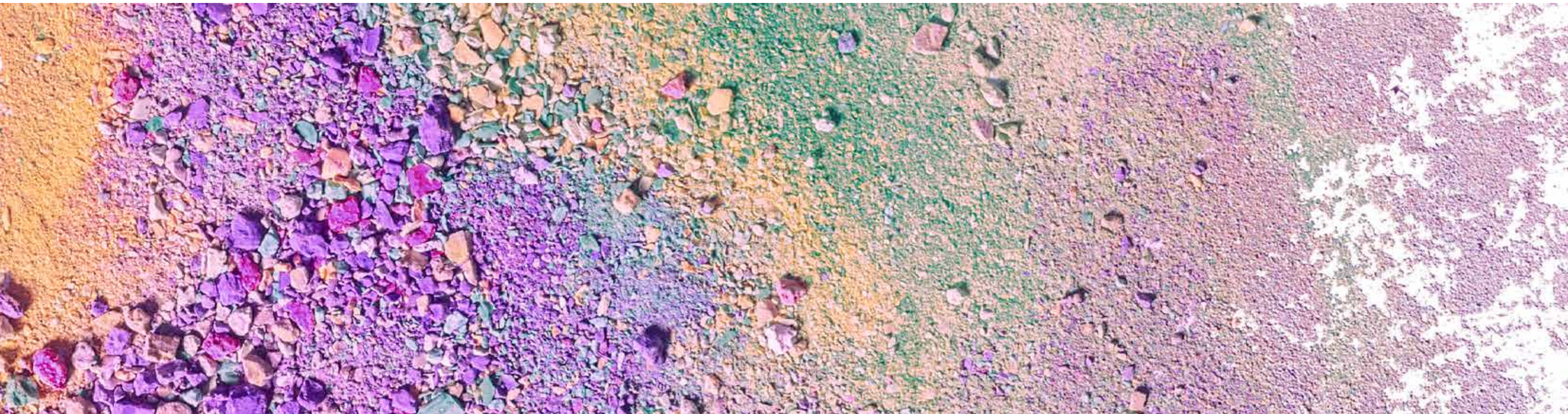
High variety of white.
Create your own white.



Shading Examples

HEUCOPLAST™	Ca / Zn compound, + 0.1% of pigment	Δ L*	Δ a*	Δ b*	Ca / Zn compound, + 0.2% of pigment	Δ L*	Δ a*	Δ b*
190 53 SE *		-	- 0.3	+ 0.7		-	- 0.4	+ 1.2
490 01 SE		- 0.8	+ 0.4	- 0.9		- 1.5	+ 0.8	- 1.8
590 12 SE		- 2.0	- 1.2	- 3.3		- 3.3	- 1.7	- 5.4
690 15 *		- 0.3	- 1.0	- 0.2		- 0.5	- 1.8	- 0.5
990 33 SE		- 2.0	-	- 0.7		- 3.7	-	- 1.1

* Customized products. Further shades are available on demand.



Custom solutions to color raw polymer

Heubach tailor-made colors are pigment preparations that have been specifically prepared for compounders, formulators and extruders. These come in the form of masterbatch micro-granules and are suitable for a wide range of plastic applications, including window profiles and pipes. This custom pigment solution enables processors to color raw polymer efficiently at a reduced cost.

Global expertise in matching colors

With globally active production facilities and service centers, Heubach is able to develop pigment preparations to suit its customers' specific needs. For pipes alone, Heubach can provide over 200 colorants. This depth, combined with its ability to match colors on the basis of detailed pigment analyses, enables Heubach to supply its customers with precisely matched solutions within short periods of time.

More performance for your plastics

Heubach tailor-made color solutions open up design options for plastic manufacturers, producers and processors, enabling them to enhance the performance of their plastic products both in terms of visual impact and user benefits. With support provided from the laboratory through to final production, customers are able to leverage Heubach's extensive expertise to maximize process efficiency as well as end results.





Our product specifications, application information and any other information in this document is based on our current state of knowledge at the Revision Date mentioned below. They are non-binding and cannot be taken as a guarantee. The processing company must establish the suitability of individual products itself. As their use lies beyond our knowledge and control, we cannot accept any liability relating to the use of our products in particular applications. In addition to that, the legal rights of third parties must always be considered. The specification agreed between the customer and ourselves is the basis upon which our general sales and delivery conditions are set and is the deciding factor concerning any liabilities. Our standard specification is then valid if no specification has been agreed upon between the customer and ourselves.

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