



Design for your Floor Coatings

HEUCO® FLOOR and HEUCOSIN® -Special pigment preparations

The Pigment Preparations

Polymer Floor Coatings HEUCOSIN® - Special and HEUCO®FLOOR pigment preparations are the two principal product lines developed to meet the specific requirements of thickfilm systems especially for polymer floor coatings.



In most cases the desired color shades can only be obtained by blending color pigments with significant differences regarding surface characteristics and specific weights. As a consequence they tend to separate during the film forming process. This well-known phenomenon is either called floating (horizontal separation) or flooding (vertical separation). The first causes undesirable surface texturing (Bénard cells) whereas the latter alters the color shade as a result of pigments being distributed unevenly in the direction perpendicular to the pigment surface (rub-out test). These effects are especially observed in thickfilm formulations.

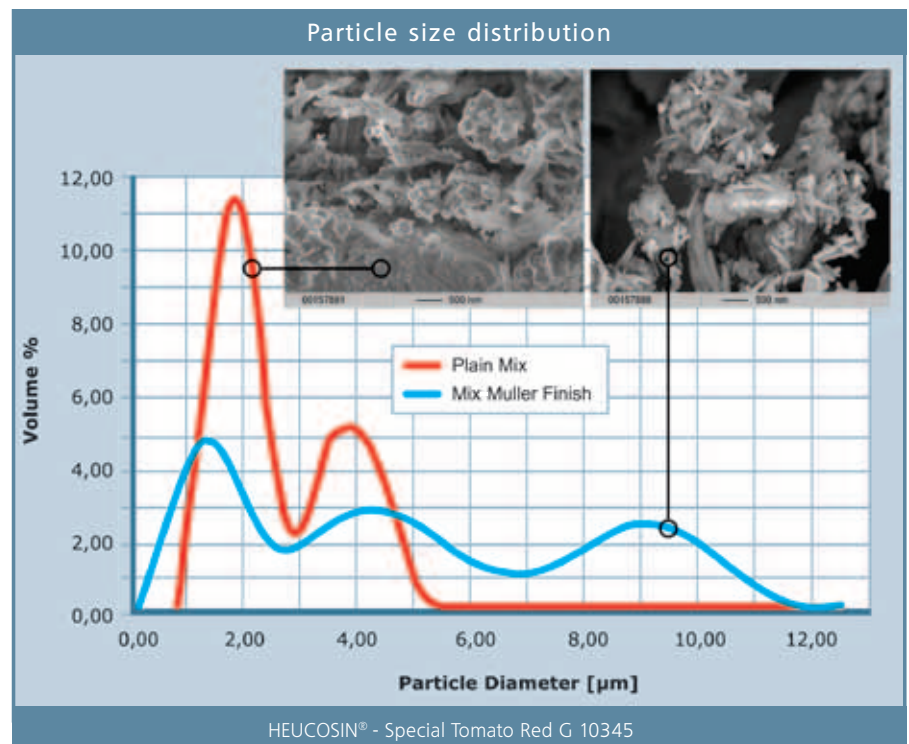
Multipigment Preparations

HEUCOSIN® - Special

The HEUCOSIN® - Special products are ready-to-use pigment preparations which have been predispersed 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 and PMMA systems. HEUCOSIN® - Special Plus is especially designed for waterborne EP formulations.

Mix Mulling Technology Easy dispersion even at construction sites



Unique Finish Technology

The very specific properties of HEUCOSIN® - Special preparations are the result of a unique finish technology. A combined co-finishing process is used in what is known as mix mulling which includes both, intensive mixing and grinding. The effects obtained bring about interlocking of the pigment surfaces thus minimizing the separation of the predispersed pigments and the floating and flooding phenomenon later during the film formation.

In comparison to straight pigment blends the HEUCOSIN® - Special preparations also exhibit outstanding batch-to-batch consistency which enables the user to create colors which are perfectly uniform. This can even be achieved with simple stirring equipment often found at construction sites. It is worthwhile to mention that this ease of processing is based on the physical modification of the pigment surfaces and does not negatively influence the general film properties as can often be observed by the addition of ionic dispersion additives.

Excellent Fastness Properties

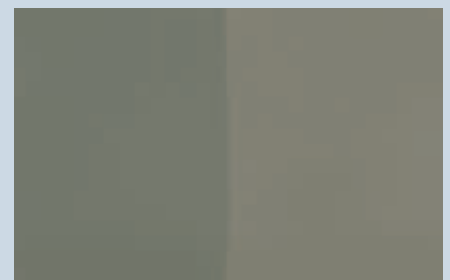
HEUCOSIN® - Special pigment preparations are designed for exterior use and therefore exhibit very good light and weather fastness as well as excellent resistance to solvents, acids and alkalines.

Value-in-use Formulation costs with HEUCOSIN® - Special are lower when compared to the total costs of handling and testing of several monopigments or monopigmented pastes on a commercial scale.

Minimized floating & flooding due to interlocking of the pigment surfaces



Tomato Red G 10345		Blend
34.9	L*	38.4
56.2	a*	55.1
40.3	b*	40.4



Concrete Grey G 6556 N		Blend
50.6	L*	54.6
-1.6	a*	-1.3
6.9	b*	9.0



Blue Grey G 6528 N		Blend
40.0	L*	44.5
-2.6	a*	-4.6
-1.9	b*	-3.6



Leaf Green G 6557 N		Blend
32.2	L*	35.4
-33.0	a*	-32.0
-24.3	b*	26.9

Guide formulation

Self-levelling floor coating with solvent-free epoxy resin and HEUCOSIN® - Special pigment

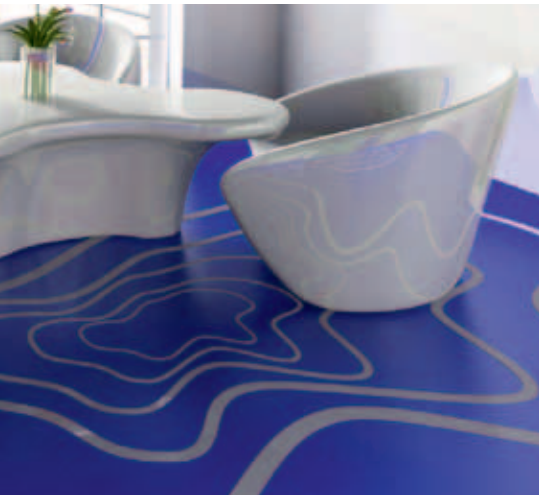
	325 g	Epilox-T19-38/700	(epoxy resin, Leuna Harze GmbH)
+	451 g	Quartz flour	(Quarzwirk Frechen)
+	1 g	Anti Terra 204	(dispersing agent, Byk-Chemie)
+	10 g	Byk 501	(deaerating agent, Byk-Chemie)
+	50 g	HEUCOSIN® - Special Pigment	(corresponding to 5%)
+	163 g	Epilox curing agent H10-34	(curing agent, Leuna Harze GmbH)
=	1.000 g	total weight	

HEUCOSIN® - Special			EP water-borne	EP solvent-free	PU	PMMMA	Light	Weather	Acid	Alkali
Full Shade	Shade	Application Fields				Fastness Properties				
HEUCOSIN® - Special Beige G 10121 RAL 1001	Beige		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Sand Yellow G 6514 N RAL 1002	Sand Yellow		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Sand Yellow G 10500 RAL 1002	Sand Yellow	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Brown Beige G 6515 N RAL 1011	Brown Beige		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Brown Beige G 10501 RAL 1011	Brown Beige	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Olive Yellow G 6530 N RAL 1020	Olive Yellow		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Olive Yellow G 10502 RAL 1020	Olive Yellow	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Tomato Red G 10345 RAL 3013	Tomato Red		■ ■	■ ■	■ ■	■ ■	7 - 8	4 - 5	5	5
HEUCOSIN® - Special Plus Tomato Red G 10503 RAL 3013	Tomato Red	■ ■	■	■	■	■	7 - 8	4	5	5
HEUCOSIN® - Special Leaf Green G 6557 N RAL 6002	Leaf Green		■ ■	■ ■	■ ■	■ ■	7 - 8	4 - 5	5	5
HEUCOSIN® - Special Plus Leaf Green G 10504 RAL 6002	Leaf Green	■ ■	■	■	■	■	7 - 8	4 - 5	5	5
HEUCOSIN® - Special Pale Green G 6516 N RAL 6021	Pale Green		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Pale Green G 10505 RAL 6021	Pale Green	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Silver Grey G 6555 N RAL 7001	Silver Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Silver Grey G 10506 RAL 7001	Silver Grey	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Anthracite Grey G 10120 RAL 7016	Anthracite Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Concrete Grey G 6556 N RAL 7023	Concrete Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Concrete Grey G 10507 RAL 7023	Concrete Grey	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Stone Grey G 6517 N RAL 7030	Stone Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Stone Grey G 10508 RAL 7030	Stone Grey	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Blue Grey G 6528 N RAL 7031	Blue Grey		■ ■	■ ■	■ ■	■ ■	7 - 8	4 - 5	5	5
HEUCOSIN® - Special Plus Blue Grey G 10509 RAL 7031	Blue Grey	■ ■	■	■	■	■	7 - 8	4 - 5	5	5
HEUCOSIN® - Special Pebble Grey G 6518 N RAL 7032	Pebble Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Pebble Grey G 10510 RAL 7032	Pebble Grey	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Cement Grey G 6531 N RAL 7033	Cement Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Cement Grey G 10511 RAL 7033	Cement Grey	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Light Grey G 10139 RAL 7035	Light Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Plus Light Grey G 10512 RAL 7035	Light Grey	■ ■	■	■	■	■	8	5	5	5
HEUCOSIN® - Special Dust Grey G 10140 RAL 7037	Dust Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5
HEUCOSIN® - Special Agate Grey G 10135 RAL 7038	Agate Grey		■ ■	■ ■	■ ■	■ ■	8	5	5	5

› Special shades available on request

Monopigment Preparations

HEUCO®FLOOR



The HEUCO®FLOOR product lines are composed of two sets of pastes with different pigment carriers to meet the different requirements of EP- and PU-based systems.

HEUCO®FLOOR-EP pastes are created for EP-based formulations and are based on monopigments predispersed in a solvent-free epoxy resin.














HEUCO®FLOOR-PU pastes are created for PU-based formulations and are based on monopigments predispersed in a vegetable oil with high hydroxyl value and low moisture content.











The careful choice of pigment and pigment carrier in the HEUCO®FLOOR pastes minimizes the floating and flooding during the drying stage. No adverse effects on the setting behaviour and the final coating properties are observed due to the absence of plasticizers in the HEUCO®FLOOR pastes.

The combination of several HEUCO®FLOOR pigments enable the formulator to match almost all color shades requested by the market – even for small order quantities.

Guide formulations for RAL shades

Product Name	%	RAL 1002	RAL 1011	RAL 1020	RAL 3013	RAL 6002	RAL 6021	RAL 7001	RAL 7023	RAL 7030	RAL 7031	RAL 7032	RAL 7033	RAL 7035	RAL 7037	RAL 7040
HEUCO®FLOOR Yellow 190 07 EP	15	35.42	62.34	38.52	46.99	54.93	3.72		9.95	10.14		6.31	5.74		3.51	
HEUCO®FLOOR Yellow 190 02 EP	25				23.34											
HEUCO®FLOOR Yellow 190 08 EP	15					19.65										
HEUCO®FLOOR Red 390 01 EP	50		1.24							0.09						
HEUCO®FLOOR Red 390 02 EP	50															3.00
HEUCO®FLOOR Red 390 06 EP	15				29.67			0.72								
HEUCO®FLOOR Blue 590 06 EP	50							7.36			10.83			0.72		7.70
HEUCO®FLOOR Blue 590 04 EP	40										9.99					
HEUCO®FLOOR Green 690 01 EP	50	0.26		2.99		15.32	24.43		4.64			0.75	13.29		1.00	
HEUCO®FLOOR Green 690 02 EP	20					10.10										
HEUCO®FLOOR Black 990 01 EP	50	0.40	1.37	2.38			0.17	3.40	10.40	7.63	17.42	2.01	8.59	0.98	12.57	
HEUCO®FLOOR White 990 09 EP	30	63.93	35.04	56.11			71.68	88.53	75.01	82.14	61.76	90.92	72.38	98.30	82.92	89.30

HEUCO® FLOOR EP	Full Shade	Chemical Class	Color Index	Pigment Load [%]	Fastness Properties			
					Light	Weather	Acid	Alkali
HEUCO® FLOOR Yellow 190 07 EP		Iron Oxide Yellow	P.Y. 42	15	8	5	5	5
HEUCO® FLOOR Yellow 190 02 EP		Diarylide Yellow	P.Y. 83	25	7 - 8	3 - 4	5	5
HEUCO® FLOOR Yellow 190 08 EP		Benzimidazolone	P.Y. 194	15	7 - 8	3 - 4	5	5
HEUCO® FLOOR Red 390 01 EP		Iron Oxide Red	P.R. 101	50	8	5	5	5
HEUCO® FLOOR Red 390 02 EP		Iron Oxide Red	P.R. 101	50	8	5	5	5
HEUCO® FLOOR Red 390 06 EP		Disazo Condensation	P.R. 214	15	7 - 8	3 - 4	5	5
HEUCO® FLOOR Blue 590 04 EP		Cobalt Blue Pigment	P.B. 28	40	8	5	5	5
HEUCO® FLOOR Blue 590 06 EP		Cobalt Blue Pigment	P.B. 36	50	8	5	5	5
HEUCO® FLOOR Green 690 01 EP		Chromium Oxide Green	P.G. 17	50	8	5	5	5
HEUCO® FLOOR Green 690 02 EP		Phthalocyanine Green	P.G. 7	20	8	5	5	5
HEUCO® FLOOR Black 990 01 EP		Iron Oxide Black	P.Bk. 11	50	8	5	5	5
HEUCO® FLOOR Black 990 03 EP		Black Spinel Pigment	P.Bk. 28	50	8	5	5	5
HEUCO® FLOOR White 990 09 EP		Titanium Dioxide	P.W. 6	30	8	5	5	5

HEUCO® FLOOR PU	Full Shade	Chemical Class	Color Index	Pigment Load [%]	Fastness Properties			
					Light	Weather	Acid	Alkali
HEUCO® FLOOR Yellow 190 04 PU		Iron Oxide Yellow	P.Y. 42	30	8	5	5	5
HEUCO® FLOOR Yellow 190 05 PU		Nickel Rutile Pigment	P.Y. 53	50	8	5	5	5
HEUCO® FLOOR Yellow 190 06 PU		Chromium Rutile Pigment	P.Br. 24	50	8	5	5	5
HEUCO® FLOOR Red 390 04 PU		Iron Oxide Red	P.R. 101	50	8	5	5	5
HEUCO® FLOOR Red 390 05 PU		Disazo Condensation	P.R. 214	15	7 - 8	3 - 4	5	5
HEUCO® FLOOR Blue 590 03 PU		Cobalt Blue Pigment	P.B. 28	50	8	5	5	5
HEUCO® FLOOR Green 690 03 PU		Chromium Oxide Green	P.G. 17	50	8	5	5	5
HEUCO® FLOOR Brown 890 01 PU		Chromium Iron Oxide	P.Br. 29	50	8	5	5	5
HEUCO® FLOOR Black 990 05 PU		Iron Oxide Black	P.Bk. 11	50	8	5	5	5
HEUCO® FLOOR White 990 10 PU		Titanium Dioxide	P.W. 6	50	8	5	5	5

® = Registered trademark of Heubach GmbH.

Our product specific and application information are based upon our current knowledge. 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.

www.heubachcolor.de

Europe: Heubach GmbH · Heubachstraße 7 · 38685 Langelsheim · Germany · Tel 49-5326-52-0 · Fax 49-5326-52-213

USA: Heucotech Ltd. · 99 Newbold Road · Fairless Hills, PA 19030 · USA · Tel 1-800-HEUBACH · Fax 1-215-736-2249

Asia: Heubach Colour Pvt. Ltd. · 2nd Floor, Landmark-Building · Race Course Circle · Baroda 390 007 · India · Tel 91-265-2343-310 · Fax 91-265-2341-682

Hangzhou Heubach Pigment Co., Ltd · Room 11-1-302, Da Shi Jie Wu Jin Cheng, 168 Jian Ding Road, Hangzhou 310021 · China · Tel 86-573-87634106 · Fax 86-573-87967925

E-Mail: sales@heubachcolor.de

heubach

COMPETENCE IN COLOR