



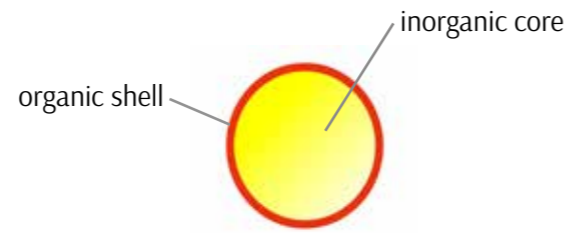
# Duroblend<sup>®</sup>

Hybrid pigments – Designed to replace lead based colourants

# Duroblend®

## The alternative pigment in environmental protection

Duroblend® combines technical advantages of inorganic and organic pigments. To produce this type of products Habich is using an innovative two step embedding process. Selected organic pigments will be pre-dispersed and embedded in the inorganic core.



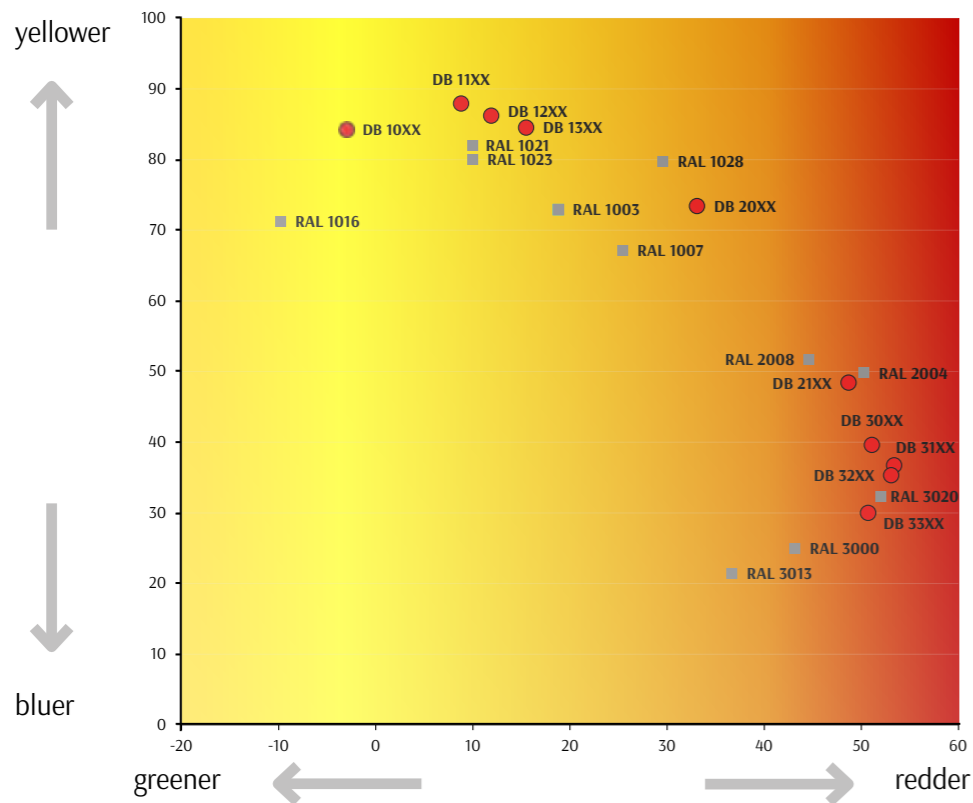
Duroblend® pigments cover a wide range of coating and plastic applications as the picked organic pigments are technically suitable for these uses.

In the often technically demanding color space of greenish yellow to bluish red, Duroblend® offers an excellent basis for matching RAL color shades as well as replacing lead pigments whilst simultaneously maintaining their high levels of brilliance and opacity.

### Advantages of Duroblend®

- Optimized application properties
- Easy handling
- Synergistic effects can be achieved
- Excellent reproducibility
- Designed to replace yellow to red shade lead pigments

## Duroblend® - ideal starting point to match RAL-shades



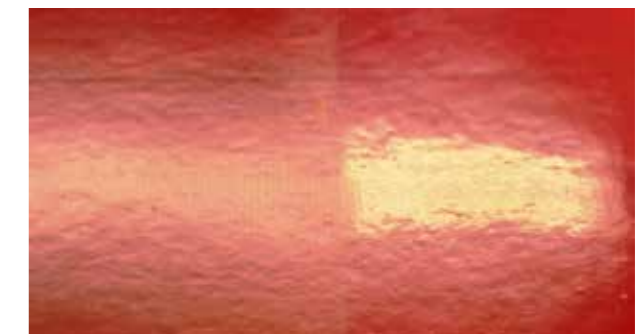
## Main applications

### Duroblend® can be used in most binders



## Pigment preparation vs. blend

Duroblend® pigment preparations have superior properties in opacity, colour strength and durability compared to the well known blends between organic and inorganic colour pigments. The oil absorption could be decreased due to our unique manufacturing process to allow higher pigment loadings.



## Regulators affairs

All Duroblend® pigment preparations comply with the related requirements of European Union Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). More information about regulatory affairs are available on request.

Decorative coatings											
Duroblend®	Oil absorption [g/100g]	BET [m <sup>2</sup> /g]	Acid resistance	Alkali resistance	Fastness to light (full shade)	Fastness to light (1:10 TiO <sub>2</sub> )	Fastness to weather (full shade)	Fastness to weather (1:10 TiO <sub>2</sub> )	Fastness to solvent	Opacity TiO <sub>2</sub> =100% [%]	
1000	24	6.6	5	5	6	5-6	4	3-4	3	64	
1100	22	5.8	5	5	7	5	4	3-4	3	62	
1200	21	6.0	5	5	7	5	4	3-4	3	78	
1300	21	5.8	5	5	6-7	5	4	3-4	3	72	
1400	21	6.5	5	5	6-7	4-5	4	3-4	3	68	
2000	21	5.7	5	5	6	4-5	4	3	3	83	
2100	18	5.2	5	5	6-7	5-6	3-4	3	4-5	76	
3000	18	5.2	5	5	7-8	6-7	3-4	3	3-4	72	
3100	22	7.7	5	5	7-8	6-7	3-4	3	3-4	76	
3200	21	7.7	5	5	7-8	6-7	3-4	3	3-4	71	
3300	20	7.3	5	5	7	5-6	3-4	3	3-4	75	

Industrial coatings											
Duroblend®	Oil absorption [g/100g]	BET [m <sup>2</sup> /g]	Acid resistance	Alkali resistance	Fastness to light (full shade)	Fastness to light (1:10 TiO <sub>2</sub> )	Fastness to weather (full shade)	Fastness to weather (1:10 TiO <sub>2</sub> )	Fastness to solvent	Opacity TiO <sub>2</sub> =100% [%]	
1010	24	6.6	5	5	6	5-6	4	3-4	3	64	
1110	20	5.8	5	5	7	5	4	3-4	3	62	
1210	22	6.0	5	5	7	5	4	3-4	3	78	
1310	21	5.8	5	5	6-7	5	4	3-4	3	72	
1410	23	6.5	5	5	6-7	4-5	4	3-4	3	68	
2010	21	5.7	5	5	6	4-5	4	3	3	83	
2110	19	5.2	5	5	6-7	5-6	3-4	3	4-5	76	
3010	18	5.4	5	5	7-8	6-7	3-4	3	3-4	72	
3110	22	7.7	5	5	7-8	6-7	3-4	3	3-4	76	
3210	21	7.7	5	5	7-8	6-7	3-4	3	3-4	71	
3310	20	7.3	5	5	7	5-6	3-4	3	3-4	75	

Automotive coatings											
Duroblend®	Oil absorption [g/100g]	BET [m <sup>2</sup> /g]	Acid resistance	Alkali resistance	Fastness to light (full shade)	Fastness to light (1:10 TiO <sub>2</sub> )	Fastness to weather (full shade)	Fastness to weather (1:10 TiO <sub>2</sub> )	Fastness to solvent	Opacity TiO <sub>2</sub> =100% [%]	
1020	18	6.0	5	3	8	7-8	5	5	5	65	
1120	19	6.7	5	3	8	7-8	4-5	4	5	61	
1220	19	6.7	5	3	8	7-8	4-5	4	4-5	79	
1320	19	6.7	5	3	8	7-8	4-5	4	4-5	73	
1420	21	7.5	5	3	8	7-8	4-5	4	4	67	
2020	19	6.4	5	3	8	7-8	4-5	4	4	83	
2120	16	4.1	5	3	8	7-8	4-5	4	3-4	76	
3020	23	8.2	5	3	8	7-8	4-5	4	4-5	73	
3120	22	6.8	5	4-5	8	7-8	4-5	4	4-5	76	
3220	21	6.0	5	4-5	8	7-8	4-5	4	4-5	70	
3320	22	6.7	5	4-5	8	7-8	4-5	4	4-5	75	

Powder coatings											
Duroblend®	Oil absorption [g/100g]	BET [m <sup>2</sup> /g]	Acid resistance	Alkali resistance	Fastness to light full shade	Fastness to light (1:10 TiO <sub>2</sub> )	Fastness to weather full shade	Fastness to weather (1:10 TiO <sub>2</sub> )	Fastness to solvent	Opacity TiO <sub>2</sub> =100% [%]	
1030	18	6.0	5	3	8	7-8	5	5	5	65	
1130	19	6.7	5	3	8	7-8	4-5	4	5	61	
1230	19	6.7	5	3	8	7-8	4-5	4	4-5	79	
1330	19	6.7	5	3	8	7-8	4-5	4	4-5	73	
1430	21	7.5	5	3	8	7-8	4-5	4	4	67	
2030	19	6.4	5	3	8	7-8	4-5	4	4	83	
2130	16	4.1	5	3	8	7-8	4-5	4	3-4	76	
3030	23	8.2	5	3	8	7-8	4-5	4	4-5	73	
3130	22	6.8	5	4-5	8	7-8	4-5	4	4-5	76	
3230	21	6.0	5	4-5	8	7-8	4-5	4	4-5	70	
3330	22	6.7	5	4-5	8	7-8	4-5	4	4-5	75	

The colours are only for visualization and are not an exact reproduction.



## Coil coatings

Duroblend®	Oil absorption [g/100g]	BET [m <sup>2</sup> /g]	Acid resistance	Alkali resistance	Fastness to light (full shade)	Fastness to light (1:10 TiO <sub>2</sub> )	Fastness to weather (full shade)	Fastness to weather (1:10 TiO <sub>2</sub> )	Fastness to solvent	Opacity TiO <sub>2</sub> =100% [%]
1040	17	4.4	5	5	8	7-8	5	4-5	4-5	63
1140	20	6.8	5	4-5	8	7-8	4-5	4	4-5	63
1240	20	6.4	5	4-5	8	7	4-5	4	4-5	78
1340	20	6.7	5	4-5	8	7	4-5	4	4-5	72
1440	21	7.1	5	4	8	7	4-5	3-4	4-5	68
2040	22	8.3	5	3-4	8	7	4-5	4	4-5	83
2140	22	8.9	5	4-5	8	7	4-5	4	4-5	76
3040	23	8.2	5	4-5	8	7	4-5	4	4-5	71
3140	23	8.2	5	4-5	8	7	4-5	4	4-5	76
3240	22	6.8	5	4-5	8	7-8	4-5	4	4-5	72
3340	21	6.0	5	4-5	8	7-8	4-5	4	4-5	75

## Polyolefines

Duroblend®	Oil absorption [g/100g]	BET [m <sup>2</sup> /g]	Acid resistance	Alkali resistance	Fastness to light (full shade)	Fastness to light (1:10 TiO <sub>2</sub> )	Fastness to weather (full shade)	Fastness to weather (1:10 TiO <sub>2</sub> )	Fastness to heat [°C]
1050	18	5.2	5	5	7-8	7-8	4-5	4-5	260
1150	19	5.5	5	5	7-8	7-8	4-5	4-5	260
1250	20	6.0	5	5	7-8	7-8	4-5	4-5	260
1350	21	6.7	5	4-5	7	7	4-5	4-5	260
1450	28	9.7	4-5	4	7	6-7	4-5	4-5	260
2050	28	9.7	4-5	4	7	6-7	4-5	4-5	260
2150	19	5.6	5	5	7-8	7	4-5	4-5	260
3050	20	5.6	5	5	7-8	7	4-5	4-5	260
3150	18	4.9	5	5	8	7-8	4-5	4-5	260
3250	20	5.9	5	5	8	7	4-5	4-5	260
3350	21	6.3	5	5	8	7	4-5	4-5	260

## PVC

Duroblend®	Oil absorption [g/100g]	BET [m <sup>2</sup> /g]	Acid resistance	Alkali resistance	Fastness to light (full shade)	Fastness to light (1:10 TiO <sub>2</sub> )	Fastness to weather (full shade)	Fastness to weather (1:10 TiO <sub>2</sub> )	Fastness to heat [°C]
1060	25	12.0	5	5	6	5-6	4-5	4	220
1160	23	15.6	5	4-5	6-7	5-6	4-5	4	220
1260	23	15.6	5	4-5	6	5-6	4-5	4	220
1360	23	14.3	5	4-5	6	5-6	4-5	4	220
1460	22	6.2	5	5	7	6	4-5	4	220
2060	22	6.3	5	5	7	6	4-5	4	220
2160	19	5.6	5	5	7-8	7	4-5	4	260
3060	20	5.6	5	5	7-8	7	4-5	4	260
3160	18	4.9	5	5	8	7-8	4-5	4	260
3260	20	5.9	5	5	8	7	4-5	4	260
3360	21	6.3	5	5	8	7	4-5	4	260



The colours are only for visualization and are not an exact reproduction.

## Habich supports your creativity


Habich GmbH is a globally recognized manufacturer of special inorganic pigments. Our product portfolio includes, inorganic coloured pigments, coloured pigment preparations, and a broad range of inorganic corrosion protection pigments, pigment slurries and pigment pastes.


As a 6th generation Austrian family owned business we are known for reliability and sustainability in our business relationships. For more than 170 years, customer satisfaction and customer success have been our main objectives. We provide flexibility and a high degree of innovative strength.

Because of our highly motivated, chemically and technically trained employees we also can offer tailor made solutions to meet the needs of our customers.



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