



Durovan[®]

Innovative Bismuth Vanadate pigments

Durovan®

Brilliance for years

Durovan® is a comprehensive range of inorganic Bismuth Vanadate pigments (PY 184) covering the colour space between green shade and red shade yellow. All products in this range have outstanding application properties and are easy to disperse.

Durovan® offers excellent durability across the entire range. All grades offer extraordinary light and weather fastness in full shade and reduction. Furthermore, these durable products have an improved opacity, excellent tinting strength and outstanding brightness. Durovan® pigments are very compatible and that's why they are an excellent base to match a wide range of colours.

Durovan® C - series

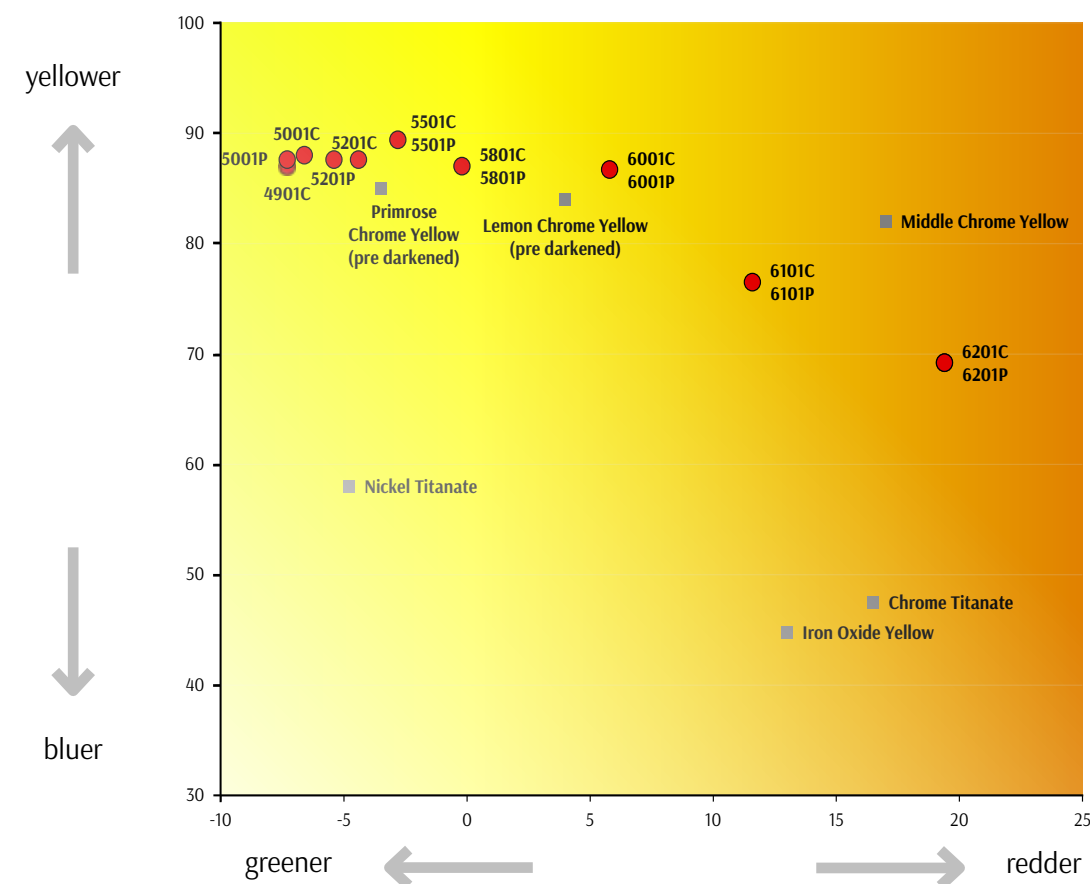
These micronized and surface-modified pigments fulfill the special requirements of the paint and coating industry. The level of pigment agglomerates has been significantly reduced through an intense milling process.

Durovan® 4901C – Durovan® 6201C products offer extraordinary compatibility with a wide range of coating systems. They are particularly effective in water-based systems where they offer outstanding dispersibility and colour development.

Durovan® P - series

Durovan® pigments for plastics can be characterized by chemical resistance at high temperatures where aggressive fission products may negatively influence the pigment colour. The encapsulation of Durovan® pigments for plastics significantly reduces the direct contact between the pigment and those substances and consequently higher colour stability can be achieved.

Yellow pigments colour space



Durovan® for coatings

Easy dispersibility, shorter processing times, reduced energy input and lower process costs are powerful arguments for the use of Durovan® 4901C – 6201C pigments. Additionally the very fast colour development and reduced shear stress together with better batch reproducibility make a convincing case for the use of Durovan® pigments.



Stability & fastness

Full shade
Reduction [1:10 TiO₂]

	Solvent resistance ¹	Acid resistance ²	Alkali resistance ²	SO ₂ resistance ³	Light fastness ⁴	Weather fastness ⁵
Full shade	5	5	5	5	8	4-5
Reduction [1:10 TiO ₂]	5	5	5	5	8	4-5



¹ Scale from 1 to 5, where 1 = severe change; 5 = no change
Tested solvents: Water, Ethanol, Xylene, n-Butylacetate, 1-Methoxypropane-2-ol, Ethyl methyl ketone

² Scale from 1 to 5, where 1 = severe change; 5 = no change
Pigments were dipped into 2 % hydrochloric acid or 5 % sodium hydroxide solution.

³ Scale from 1 to 5, where 1 = severe change; 5 = no change according to DIN 50018, 2 l of SO₂ gas per cycle

⁴ from 1 to 8, where 1 = severe change; 8 = no change according to DIN EN ISO 105-B01. Light fastness was tested in an alkyd/melamine baking enamel system.

⁵ Weather fastness was tested in alkyd/melamine system using the five-step gray scale (DIN EN ISO 20105-A02) Scale: 1=severe change, 5=no change.

Product range

Full shade	Reduction 1:10 TiO ₂	Durovan®	Opacity TiO ₂ =100% [%]	Density [g/ml]	Humidity [%]	Oil absorption [g/100g]	pH-value	Residue on sieve 325 mesh [%]	Bulk density [kg/l]	Tamped density [kg/l]
		4901C	81	5.7	0.5	20	8	< 0.1	0.7	1.3
		5001C	82	5.6	0.5	20	8	< 0.1	0.7	1.3
		5011C	82	5.7	0.5	22	8	< 0.1	0.7	1.3
		5201C	84	5.6	0.5	19	8	< 0.1	0.7	1.3
		5501C	84	5.7	0.5	19	8	< 0.1	0.6	1.5
		5801C	85	5.7	0.5	18	8	< 0.1	0.6	1.5
		6001C	83	5.2	0.5	15	8	< 0.1	0.8	1.7
		6101C	84	4.8	0.5	15	8	< 0.1	0.7	1.6
		6201C	87	4.8	0.5	17	8	< 0.1	0.8	1.7

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



- Industrial coatings
- Automotive refinishing coatings
- Facade coatings
- Pigment concentrates
- Decorative coatings
- Powder coatings
- Coil coatings
- Printing inks

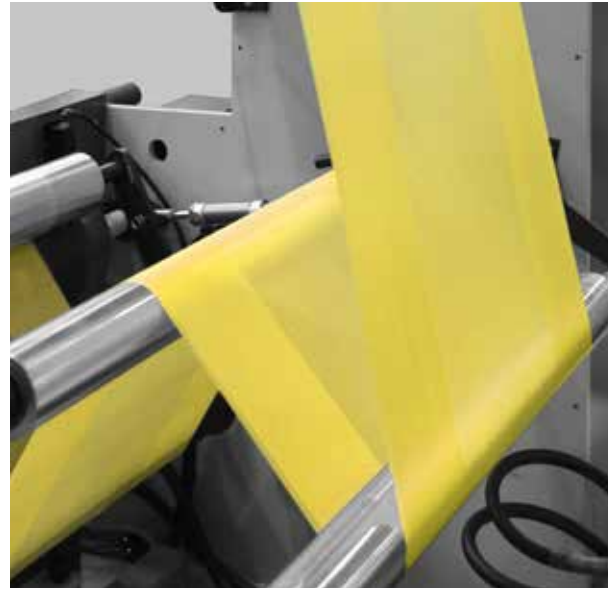
Durovan® for plastics

Bismuth vanadates are high quality, inorganic yellow pigments. By special surface modification the thermal stability can be significantly improved in order to make these pigments suitable for plastic applications.

The Durovan® P series are powder-form bismuth vanadates suitable for the plastics sector, which exhibit high heat stability and easy dispersibility.

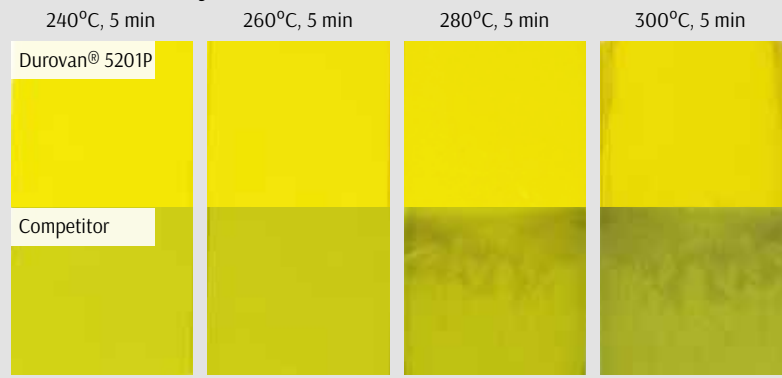
Due to the good weather resistance, the Durovan® pigments for plastics are also suitable for outdoor use.

The low solubility of the pigments results in a high migration fastness, so that these pigments can also be used for coloring food packaging and consumer goods.



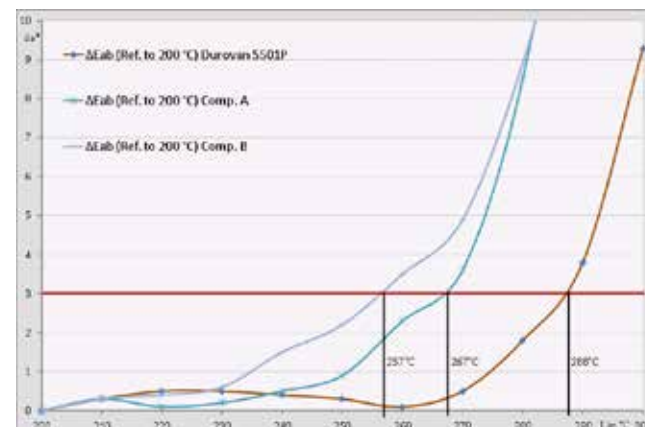
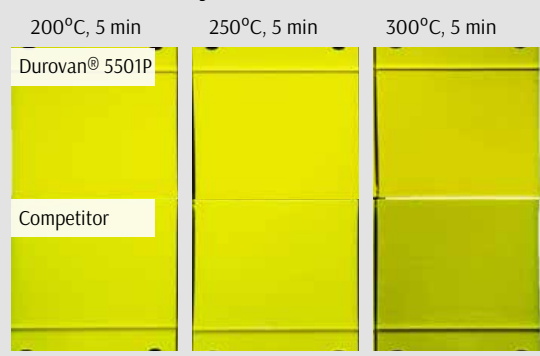
Thermal stability

Heat stability in ABS



PVC	200
PA	290
LD-PE	250
HD-PE	285
PP	260
PS	270
ABS	280

Heat stability in HDPE



The heat stability depends on the respective processing conditions (preliminary tests recommended).

Fastness properties	Solvent resistance ¹	5
	Acid resistance ²	5
	Alkali resistance ²	5
	Light fastness ⁴	8
	Weather fastness ⁵	4-5
	Ammonium sulphide	Excellent
	Hydrogen peroxide	Excellent

For explanations, please see page 3.



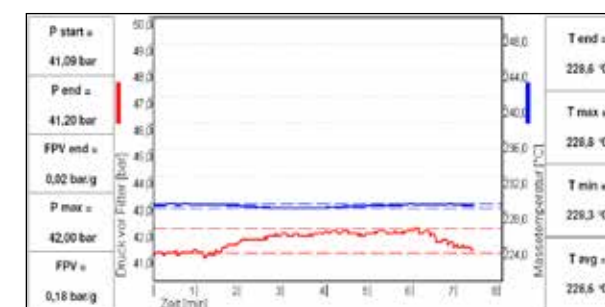
Full shade	Durovan®	Density [g/ml]	Humidity [%]	Oil absorption [g/100g]	pH-value	Residue on sieve 325 mesh [%]	Bulk density [kg/l]	Bubble foil [grains per 0.4 m ²]	Pressure filter test (25 µm) ¹ [bar/ g pig.]
	5001P	5.6	0.5	21	8	< 0.1	0.7	<100	0.20
	5201P	5.6	0.5	20	8	< 0.1	0.7	<100	0.20
	5501P	5.7	0.5	19	8	< 0.1	0.6	<100	0.22
	5801P	5.7	0.5	18	8	< 0.1	0.6	<100	0.20
	6001P	5.2	0.5	15	8	< 0.1	0.8	<100	0.20
	6101P	4.8	0.5	15	8	< 0.1	0.7	<100	0.20
	6201P	4.8	0.5	17	8	< 0.1	0.8	<100	0.21

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

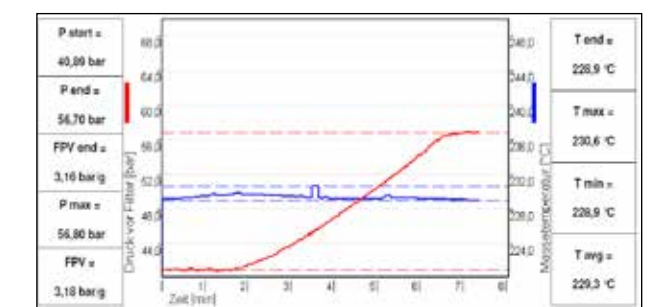
¹ LD-PE, 5% Pigment, 230°C

Filter pressure test in HDPE

Durovan® 5501P



Competitor




Habich supports your creativity


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

As a 6th generation Austrian family business, we stand for reliability and sustainability in our business relationships. For more than 170 years, customer satisfaction and customer success are our main objectives. Flexibility and innovative strength characterize our abilities. Thanks to our highly motivated, chemically and technically trained employees we also can provide tailor made solutions to meet any situation.



Habich GmbH
Weitenegg 5 | 3652 Leiben | Austria

+43 27 52 714 72 

+43 27 52 714 18 

habich@habich.com 

www.habich.com



03/2019