

Technical Information

PS05

Performance Pigments and Colors

Inorganic Pigments – Chrome Free

With this product information we would like to introduce our chrome free pigments.

In the paints and plastics industry Ferro's Pigments and Special Products unit is world-famous for its high-quality colouring products. The production, technical advice, and development of these pigments are located at our sites in Colditz and Frankfurt a.M.

Our pigments obtain their extraordinary properties through a combination of special manufacturing processes. These pigments are chemically inert and have excellent heat and weathering resistance, lightfastness, and opacity.

The pigments are suitable for the processing in paints and in plastics.

Due to the solid state reaction and, if necessary, a subsequent washing process, most pigments meet the high demands **for heavy metal release**.

This technical information leaflet highlights all our chrome free pigments. New developments in this range are the pigments Brown 26-1050 PK and Turquoise 22-5700 PK.

The following data applies to all pigments mentioned in this brochure:

Volatile components < 0,5 %

Heat stability > 500 °C

Lightfastness > 7 (Blue Wool Scale)

Weathering resistance > 4 (Grey Scale)

Migration stability = excellent

The colour deviation in the CIELAB colour space of each shipped lot compared to the standard as well as the colour strength are given in a certificate of analysis, and will be sent if required.

If your desired colour is not included in this brochure, please contact us. Our customer service is looking forward to support you in finding a solution.

Pigment	Composition	Crystal Structure	CAS No.	EINECS No.	Oil Absorption ¹ g/100g	Density ² g/cm ³	Particle Size ³ µm	BET / m ² /g	pH ⁴
23-10401 PK	Ti-Sb-Ni	Rutile	8007-18-9	232-353-3	18	4,30	1,73	2,20	7,5 - 8,5
26-1050 PK	Fe-Al	Hematite	102110-71-4	310-073-3	46	4,80	0,10	16,40	7,0 - 8,0
26-1017 PK	Zn-Fe	Spinel	68187-51-9	269-103-8	20	4,60	0,60	5,70	8,5 - 9,5
10550	Ti-Sb-Mn	Rutile	68412-38-4	270-185-2	20	4,20	0,59	6,30	10,0 - 11,0
22-10446 PK	Co-Al	Spinel	1345-16-0	310-193-6	36	4,30	1,14	11,00	9,5 - 10,5
22-5600 PK	Co-Ti	Spinel	68186-85-6	269-047-4	24	3,70	2,16	3,19	10,5 - 11,5
22-5700 PK	Co-Ti	Spinel	68186-85-6	269-047-4	22	3,90	2,38	2,55	11,0 - 12,0
21-4030 PK	Co-Ti	Spinel	68186-85-6	269-047-4	16	5,09	1,40	3,12	8,5 - 9,5
24-3061 PK	Cu-Mn-Fe	Spinel	68186-94-7	269-056-3	20	3,76	1,69	5,16	9,0 - 10,0
24-3060 PK	Mn-Fe	Spinel	68186-94-7	269-056-3	48	4,50	0,50	32,70	7,0 - 8,0
28-5333 PK	Sr	Phosphate	101356-96-1	309-892-9	30	4,25	8,80	n.a.	8,5 - 9,5

¹ DIN-ISO 787 Part 5

² DIN-ISO 787 Part 10

³ Cilas HR 850/B particle size analyser

⁴ DIN-ISO 787 Part 9

Colour Samples



23-10401 PK



26-1050 PK



26-1017 PK



10550



22-10446 PK



22-5600 PK



22-5700 PK



21-4030 PK



24-3061 PK



24-3060 PK



28-5333 PK

The pigments shown here represent only a small selection from our product range.

While every attempt has been made to reproduce colours exactly, the colour samples may differ slightly from the original.

Pigment	E.U. AP (89) 1	Empf. IX (BGVV) Germany	French pos. list France	EN 71, Part 3 *1	FDA 21 CFR Parts 170, 175, 176, 177 and 178	CONEG *1 EU Directive 94/62/EG < 100 ppm	RoHS	
23-10401 PK	P.Y. 53	+	+	+	+	2%	+	+
26-1050 PK		+	+	Not listed	+	Not listed	+	+
26-1017 PK	P.Y. 119	+	+	+	+	Not listed	+	+
10550	P.Y. 164	+	+	Not listed	-	Not listed	+	+
22-10446 PK	P.B. 28	+	+	+	+	5%	+	+
22-5600 PK	P. Gr. 50	+	+	+	+	2%	+	+
22-5700 PK	P. Gr. 50	+	+	+	+	2%	+	+
21-4030 PK	P. Gr. 50	+	+	+	+	2%	+	+
24-3061 PK	P. Bl. 26	+	+	Not listed	+	Not listed	+	+
24-3060 PK	P. Bl. 26	+	+	Not listed	+	Not listed	+	+
28-5333 PK		+	+	Not listed	-	Not listed	+	+

+ The product fulfills the indicated requirements.

+* Not for modelling clay and fingerpaint.

- The product **does not** meet the indicated requirements.

*1 The regulation applies for extraction values (mg/kg) from the packaging or toy, in this table the limits have been applied for the pigment.

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