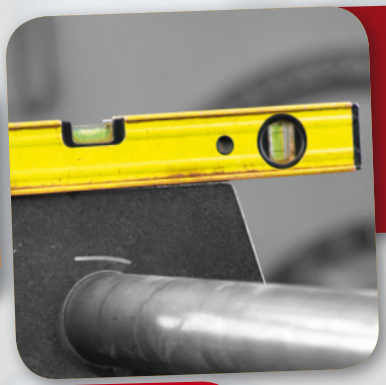
BRUCHSALER FARBEN

BRUFABLEND®

Your Way To Lead Free



BRUFABLEND® Yellow to Red

Our BRUFABLEND® pigment line of lead and chromate free yellows, oranges and reds is well suited to fit any color space.

Offered in different chemistries, BRUFABLEND® is designed to meet your technical and application requirements.

BRUFABLEND® Yellow

Dry pigment blends as the lead-free alternative to chrome yellow pigments (P.Y. 34).

BRUFABLEND® Yellow is offered in three different series designed to meet your technical and application requirements:

L-Series: Based on P.Y. 74. For indoor applications	
Main colour index: P.Y. 74 (Monoazo)	
Heat resistance [1]	140°C
Light fastness [3]	7-8 (5)
Weather fastness [4]	3
Resistance to acid [5]	5
Resistance to alkali [5]	5

E-Series: Based on bismuth vanadate. For indoor and outdoor use.	
Main colour indexes: P.Y. 184, P.Y. 83 (Disazo)	
Heat resistance [2]	200°C
Light fastness [3]	7-8 (7)
Weather fastness [4]	4-5
Resistance to acid [5]	5
Resistance to alkali [5]	5

ES-Series: Based on bismuth vanadate. For outdoor applications that require high fastness	
Main colour indexes: P.Y. 184, P.Y.110 (Isoindolinon)	
Heat resistance [2]	240°C
Light fastness [3]	8 (7-8)
Weather fastness [4]	5
Resistance to acid [5]	5
Resistance to alkali [5]	5

BRUFABLEND® Orange and Red

Dry pigment blends as the lead-free alternative to molybdate orange and red pigments (P.R. 104).

BRUFABLEND® orange and red are offered in three different series designed to meet your technical and application requirements:

E-Series: Based on bismuth vanadate. For indoor and outdoor use	
Main colour index: P.Y. 184, P.O. 34 (Disazo), P.R. 254 (DPP)	
Heat resistance [2]	200°C
Light fastness [3]	7 (5-6)
Weather fastness [4]	3-4
Resistance to acid [5]	5
Resistance to alkali [5]	5

ES-Series: Based on bismuth vanadate. For outdoor applications that require high fastness	
Main colour indexes: P.Y. 184, P.O. 73 (DPP), P.R. 254 (DPP)	
Heat resistance [2]	200°C
Light fastness [3]	8 (7)
Weather fastness [4]	4-5
Resistance to acid [5]	4-5
Resistance to alkali [5]	5

H-Series: Based on bismuth vanadate. Temperature resistant to 240°C	
Main colour indexes: P.Y. 184, P.O. 64 (Azo coupling), P.R. 254 (DPP)	
Heat resistance [2]	240°C
Light fastness [3]	7-8 (7)
Weather fastness [4]	4
Resistance to acid [5]	4-5
Resistance to alkali [5]	5

Industrial Coatings

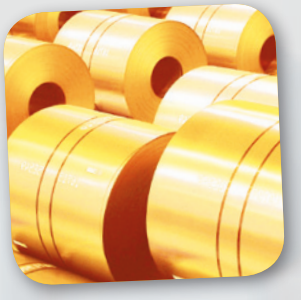
Universal use in INDUSTRIAL COATINGS whether aqueous or conventional. Available in different qualities, depending on the specific requirements.

Dispersions

Universal use in DISPERSIONS for waterborne industrial and decorative coatings. Available in different qualities, depending on the specific requirements of your pigment preparation.

Powder Coatings

For polyester, polyurethane, polyester-epoxy (hybrid), straight epoxy and acrylic POWDER COATINGS. The ES and H Series are recommended due to better heat resistance.



Coil Coatings

Our ES-Series for the yellows and H-Series for the oranges and reds are suitable for COIL COATINGS up to 240°C.

Plastic and Masterbatches

For polyolefins and PVC applications. The ES and H Series are recommended due to better heat resistance.

Lead Free

Nontoxic.
Environmentally Friendly.

BF Test methods for Pigments

1. **Heat resistance in baking enamel**

   The colour shade is stable at a processing temperature of 140°C for 20 minutes.

2. **Heat stability in HDPE**

   The stability to heat is determined according to DIN EN 12877-2 on an injection moulding machine. The processing temperature is increased in 20°C steps beginning at 200°C. The pigment-plastic-mixture is kept for 5 min. at each temperature. At the specified temperature $\Delta E=3$ is not exceeded compared to the 200°C sample.

3. **Light fastness**

   The light fastness was determined in an alkyd-melamine baking enamel system. Exposure („Xenotest“) conditions and results comply with instructions of DIN EN ISO 105-B01 using the eight-step wool scale; "8" outstanding to "1” very slight (values in brackets for tint).

4. **Weather fastness**

   The weather fastness was determined in an alkyd-melamine baking enamel system. Exposure conditions and results comply with instructions of DIN EN ISO 11341 (artificial weathering) using the five-step gray scale; "5" outstanding to "1” very slight.

5. **Resistance to acid and alkali**

   Painted (Alkyd/Melamine, 10% Pigment) metal sheets are treated with 5% sodium hydroxide or 2% hydrochloric acid for a period of 24 hours. The change in shade is assessed using the five-step gray scale; "5" outstanding to "1” very slight.

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