

# COLORANTS FOR THE **PAINT INDUSTRY**

BRIGHTER COLORS. BRIGHTER LIFE.

# PIGMENTS, PIGMENT PREPARATIONS AND DYES FROM HEUBACH

Heubach supplies pigments and dyes. These ranges, supplemented by pigment preparations, special formulations and special grades, contain a wide variety of products for the paint and surface coatings industry as well as for other special fields.

On the following pages we give a general overview of our colorants, indicating their possible uses in the main fields of application. Only the standard ranges of the pigments and dyes have been included here.

It is not appropriate to treat the other special grades, preparations and special dyes in the same way because they appear in the brochure as separate ranges with details of their special fields of application.

#### THE SYMBOLS MEAN:

- = highly recommended & dissolver dispersible
- = highly recommended
- = recommended
- O = limited suitability

We would however point out that these recommendations are a general guide intended to make it easier selecting suitable products from our range of colorants.

Frequently required physical data of the pigments and additional technical details about the aqueous pigment preparations, such as pigment and solids content as well as type and amount of solvent, are given in the brochure.

Details of coloristic and fastness properties can be taken from the literature quoted and the following pattern cards:

PI 2013 E

Pigments - Automotive, decorative and industrial paints

PI 2003 E

Pigments for automotive paints

DP 8524 ED

Colorants for Powder Coatings

Our sales organizations and our technical service and development department will be pleased to give you further information at any time.

#### **NOTES ON DIARYLIDE PIGMENTS**

It has been known for some time that thermal degradation may occur when diarylide pigments are processed in polymers at temperatures above 200 °C.

Pigments supplied by Heubach with the following Colour Index numbers are such diarylide pigments:

Pigment Yellow 12

Pigment Yellow 13

Pigment Yellow 16

Pigment Yellow 17

Pigment Yellow 81

Pigment Yellow 83

Pigment Orange 13

Pigment Orange 34

The trade names of all commercial products recommended for the paint industry that are based on the above diarylide pigments can be found in this brochure (pages 28–30).

These products can form traces of aromatic amines at processing temperatures above 200 °C in the presence of polymers (see safety data sheets; further information is also given in ETAD INFORMATION NOTICE No. 2 »Thermal Decomposition of Diarylide Pigments« – September 1990).

# CHARGE CONTROL AGENTS PRODUCT RANGE, DESCRIPTIONS AND PROPERTIES

| 1     | STANDARD RANGES OF PIGMENTS                     | 4  |
|-------|---|----|
| 1.1   | Hostaperm <sup>®1</sup> pigments                | 4  |
| 1.2   | Novoperm® pigments                              | 6  |
| 1.2.1 | Novoperm pigments<br>not standardized in paint  | 7  |
| 1.3   | Permanent pigments                              | 8  |
| 1.3.1 | Permanent pigments<br>not standardized in paint | 9  |
| 1.4   | Hansa® pigments                                 | 10 |
| 1.5   | Other pigments<br>not standardized in paint     | 11 |
| 1.5.1 | PV Fast® pigments                               | 11 |
| 1.5.2 | Graphtol® pigments                              | 12 |

| 3   | PIGMENT PREPARATIONS                 | 14    |
|-----|--------------------------------------|-------|
| 3.1 | Colanyl® 100                         | 14    |
| 3.2 | Colanyl 500                          | 16    |
| 3.3 | Hostatint™ 500                       | 18    |
| 3.4 | Hostatint A 100 / Hostatint A 100-ST | 20/21 |
| 3.5 | Hostatint UV                         | 22    |
| 3.6 | Hostatint SA                         | 23    |
| 3.7 | Hostafine®1                          | 24    |
| 3.8 | Hostanol® HW 30                      | 26    |

| 4   | DYES          | 27 |
|-----|---------------|----|
| 4.1 | Savinyl® dyes | 27 |
|     |               |    |

| 2   | NUMERICAL CODE AND SPECIAL<br>GRADES                          | 13 |
|-----|---|----|
| 2.1 | Numerical code for alteration of standards and special grades | 13 |
| 2.2 | Opaque pigments for lead-free pigmentations                   | 13 |
| 2.3 | Transparent pigments for effect paints                        | 13 |
| 2.4 | Easily dispersible (ED) pigments                              | 13 |
|     | · · · · · ·   |    |

| 5   | OVERVIEW ARRANGED<br>BY COLOUR INDEX DATA<br>(GENERIC NAME) | 28 |
|-----|---|----|
| 5.1 | Pigment Yellow  | 28 |
| 5.2 | Pigment Orange  | 30 |
| 5.3 | Pigment Red   | 30 |
| 5.4 | Pigment Violet  | 32 |
| 5.5 | Pigment Blue  | 32 |
| 5.6 | Pigment Green   | 33 |
| 5.7 | Pigment Others  | 34 |
| 5.8 | Dyes  | 35 |

### 1 STANDARD RANGES OF PIGMENTS

## 1.1 **HOSTAPERM®1 PIGMENTS**

The Hostaperm range comprises the pigments which are noted for very high fastness properties. Suitable grades are listed on the basis of excellent light and weathering fastness and satisfactory migration fastness.

#### LITERATURE

Pattern card PI 2014 E »Pigments for the Paint Industry - Hostaperm, Novoperm, Permanent, Hansa«

| PRODUCT<br>NUMBER | HOSTAPERM          | COLOUR<br>INDEX | R AUTOMOTIVE<br>Paints |                 |               |                 |               | USTR        | IAL PA             | AINTS        |                 | DEC<br>RATI<br>PAIN | VE          | PHYSICAL DATA     |                  |                     |                                   |  |
|-------------------|--------------------|-----------------|------------------------|-----------------|---------------|-----------------|---------------|-------------|--------------------|--------------|-----------------|---------------------|-------------|-------------------|------------------|---------------------|-----------------------------------|--|
|                   |                    |                 | OEM paints             | Refinish paints | Solvent-based | Water-base coat | Solvent-based | Water-based | Amine-curing epoxy | Coil coating | Powder coatings | Solvent-based       | Water-based | Density           | Specific surface | Oil absorption      | Average size of primary particles |  |
|                   |                    |                 |                        |                 |               |                 |               |             |                    |              |                 |                     |             | g/cm <sup>3</sup> | m²/g             | ml/100 g            | nm                                |  |
| 229419            | OXIDE YELLOW BV 01 | P.Y. 184        |                        |                 |               |                 | _             | •           | •                  |              |                 | •                   | •           | 6.00              | 7                | _ 18                |                                   |  |
| 270141            | OXIDE YELLOW BV 02 | P.Y. 184        |                        |                 |               |                 | _             | •           | •                  | _            |                 | •                   | •           | 6.00              | 7                | 18                  | 330                               |  |
| 105095            | YELLOW H6G         | P.Y. 175        | •                      | •               |               | •               | -             |             | •                  | _            | •               | •                   |             | 1.52              | 28               | 70                  | 215                               |  |
| 116674            | YELLOW H4G         | P.Y. 151        | •                      |                 |               |                 | -             |             | 0                  |              |                 | •                   |             | 1.55              | 23               | 48                  | 215                               |  |
| 213632            | YELLOW H4G 70      | P.Y. 151        | •                      |                 |               |                 | -             |             | 0                  |              |                 | •                   |             | 1.57              | 20               | 58                  | 278                               |  |
| 104899            | YELLOW H3G         | P.Y. 154        |                        | •               |               | 0               | -             | 0           | •                  |              | •               |                     | -           | 1.59              | 19               | 56                  | 275                               |  |
| 271059            | YELLOW H3G 02      | P.Y. 154        | •                      | •               |               |                 |               | <b>=</b>    |                    |              |                 |                     | ■***        | 1.59              | 19               | 56                  | 275                               |  |
| 104963            | ORANGE GR          | P. O. 43        | •                      | •               | •             | •               | •             | •           | •                  | •            | •               | •                   |             | 1.58              | 38               | 83                  | 190                               |  |
| 107272            | SCARLET GO         | P. R. 168       |                        |                 |               |                 | •             | •           |                    | 0            | •               | •                   |             | 2.08              | 33               | 70                  | 220                               |  |
| 210275            | RED D3G 70-CN      | P. R. 254       | •                      | •               |               | -               |               |             | •                  | •            | •               | •                   | •           | 1.60              | 27               | 55                  | 280                               |  |
| 322068            | RED D2G 71         | P. R. 254       |                        |                 | •             | •               |               |             | •                  | •            | •               | •                   | •           | 1.55              | 16               | 51                  | 310                               |  |
| 322069            | RED D2G 72         | P. R. 254       |                        |                 |               |                 |               |             | •                  | •            | •               | •                   | •           | 1.55              | 16               | <br>51              | 310                               |  |
| 108159            | RED P2GL-WD        | P. R. 179       |                        | •               |               | •               |               | •           |                    |              |                 |                     |             | 1.56              | -                | <br>35              | 45                                |  |
| 105136            | RED E2B 70         | P. V. 19        |                        | •               |               | 0               | •             | 0           | •                  | 0            |                 |                     |             | 1.46              | 31               | 85                  | 220                               |  |
| 104947            | RED E3B            | P. V. 19        | •                      | •               |               |                 |               | •           | •                  | 0            | •               | •                   | •           | 1.48              | 41               | 59                  | 195                               |  |
| 104960            | RED E5B 02         | P. V. 19        | •                      | •               |               |                 |               | •           | •                  | 0            | •               | •                   | •           | 1.47              | 90               | - <del></del><br>82 | 65                                |  |

highly recommended & dissolver dispersible

highly recommended

recommended

O limited suitability

<sup>-</sup> not measurable

| PRODUCT<br>NUMBER | HOSTAPERM          | COLOUR<br>INDEX | R AUTOMOTIVE PAINTS |                 |               |                 | IND           | USTRI       | AL PA              | AINTS        |                 | DEC<br>RATI<br>PAIN | VE          | PHYSICAL DATA     |                  |                |                                   |
|-------------------|--------------------|-----------------|---------------------|-----------------|---------------|-----------------|---------------|-------------|--------------------|--------------|-----------------|---------------------|-------------|-------------------|------------------|----------------|-----------------------------------|
|                   |                    |                 | OEM paints          | Refinish paints | Solvent-based | Water-base coat | Solvent-based | Water-based | Amine-curing epoxy | Coil coating | Powder coatings | Solvent-based       | Water-based | Density           | Specific surface | Oil absorption | Average size of primary particles |
|                   |                    |                 |                     |                 |               |                 |               |             |                    |              |                 |                     |             | g/cm <sup>3</sup> | m²/g             | ml/100g        | nm                                |
| 104952            | PINK E             | P.R. 122        |                     |                 | •             | •               |               | •           | •                  | 0            | •               | •                   | •           | 1.45              | 77               | 65             | 90                                |
| 122089            | PINK E-WD          | P.R. 122        |                     |                 |               |                 | 0             | •           |                    |              |                 |                     |             | 1.44              | 76               | 65             | 60                                |
| 245708            | PINK E-WD 01       | P. R. 122       |                     |                 |               |                 | •             | ■***        |                    |              |                 | •                   | ■##         | 1.45              | 77               | 65             | 90                                |
| 105009            | PINK EB TRANSP.    | P. R. 122       |                     |                 |               | 0               | •             | 0           | •                  | 0            |                 |                     |             | 1.47              | 80               | 78             | 55                                |
| 104954            | RED VIOLET ER 02   | P.V. 19         |                     |                 |               |                 |               | •           | •                  | 0            | •               | •                   | •           | 1.49              | 83               | 68             | 70                                |
| 197163            | VIOLET BL 01       | P.V. 23         |                     |                 | •             | •               |               | •           | •                  | •            | •               | •                   | •           | 1.50              | 103              | 70             | 50                                |
| 303120            | VIOLET RL SPEC. 01 | P.V. 23         |                     |                 | •             | •               |               | •           | •                  | •            | •               | •                   | •           | 1.49              | 80               | 78             | 50                                |
| 153605            | BLUE A4R           | P. B. 15:1      | •                   | •               |               |                 |               | •           | •                  | •            |                 | •                   | •           | 1.61              | 65               | 74             | 60                                |
| 111221            | BLUE BT-728-D      | P. B. 15:1      |                     |                 |               |                 |               |             |                    |              |                 |                     |             | 1.68              | 86               | 82             | 40                                |
| 107188            | BLUE BT-729-D      | P. B. 15:1      |                     |                 |               |                 |               |             |                    |              |                 |                     |             | 1.65              | 74               | 75             | 65                                |
| 118350            | BLUE BT-627-D      | P. B. 15:2      |                     |                 |               |                 | •             | •           | •                  | •            |                 |                     |             | 1.55              | 57               | 64             | 60                                |
| 225226            | BLUE B2G 03        | P. B. 15:3      |                     |                 |               | 0               | ■***          |             | •                  |              |                 | <b>-</b>            |             | 1.61              | 52               | 54             | 95                                |
| 118349            | BLUE BT-617-D      | P. B. 15:4      |                     |                 |               |                 | •             | •           | •                  | •            |                 |                     |             | 1.62              | 52               | 67             | 65                                |
| 105775            | GREEN GNX          | P. G. 7         |                     |                 |               |                 |               | •           | •                  | •            | •               | •                   | •           | 2.05              | 40               | 50             | 50                                |
| 240262            | GREEN GNX 01       | P. G. 7         |                     |                 |               | 0               | <b>=</b>      |             | •                  |              |                 | <b>=</b> ***        |             | 2.05              | 40               | 50             | 50                                |
| 323292            | GREEN GNX 02       | P. G. 7         |                     |                 |               |                 |               | •           | •                  | •            | •               | •                   | •           | 2.05              | 40               | 50             | 50                                |
| 104981            | BROWN HFR 01       | P. BR. 25       |                     |                 |               |                 | •             | •           | •                  | 0            | •               |                     |             | 1.52              | 90               | 86             | 80                                |

■ highly recommended & dissolver dispersible

■ highly recommended

• recommended

O limited suitability

- not measurable

## 1.2 **NOVOPERM® PIGMENTS**

Novoperm is the trade name for pigments with above-average fastness properties. These tried and tested products are suitable - depending on the grade - for use in the paint industry when the pigments have to meet special requirements.

#### LITERATURE

Pattern card PI 2014 E »Pigments for the Paint Industry - Hostaperm, Novoperm, Permanent, Hansa«

| PRODUCT<br>NUMBER | NOVOPERM      | COLOUR<br>INDEX | R AUTOMOTIVE<br>PAINTS |                 |               |                 |               | USTRI       | AL PA              | AINTS        |                 | DEC<br>RATI<br>PAIN | VE          | PHYS              | ICAL DA          | ATA            |                                   |
|-------------------|---------------|-----------------|------------------------|-----------------|---------------|-----------------|---------------|-------------|--------------------|--------------|-----------------|---------------------|-------------|-------------------|------------------|----------------|-----------------------------------|
|                   |               |                 | OEM paints             | Refinish paints | Solvent-based | Water-base coat | Solvent-based | Water-based | Amine-curing epoxy | Coil coating | Powder coatings | Solvent-based       | Water-based | Density           | Specific surface | Oil absorption | Average size of primary particles |
|                   |               |                 |                        |                 |               |                 |               |             |                    |              |                 |                     |             | g/cm <sup>3</sup> | m²/g             | ml/100 g       | nm                                |
| 105031            | YELLOW FGL    | P.Y. 97         |                        |                 |               |                 | •             | •           | •                  |              | 0               |                     | •           | 1.39              | 14               | 55             | 255                               |
| 107442            | YELLOW F2G    | P.Y. 194        |                        |                 |               |                 |               | •           | •                  |              |                 | •                   | •           | 1.46              | 19               | 98             | 315                               |
| 187854            | YELLOW 5GD 71 | P. Y. 155       | 0                      | •               |               |                 |               |             | •                  | 0            |                 | •                   | •           | 1.44              | 34               | 67             | 205                               |
| 105067            | YELLOW H2G    | P.Y. 120        |                        | •               |               |                 |               | •           | •                  |              |                 |                     |             | 1.52              | 30               | 48             | 115                               |
| 105774            | YELLOW HR     | P.Y. 83         |                        |                 |               |                 | •             | •           | •                  |              | •               | •                   |             | 1.43              | 27               | 87             | 40                                |
| 116673            | YELLOW HR 70  | P.Y. 83         | 0                      | •               | •             | •               |               | •           | •                  |              |                 | •                   | •           | 1.51              | 21               | 66             | 325                               |
| 233288            | YELLOW HR 72  | P.Y. 83         |                        | •               | •             |                 | ■***          | •           | •                  |              |                 | ■***                | •           | 1.51              | 21               | 66             | 325                               |
| 105125            | YELLOW M2R 70 | P. Y. 139       | •                      | •               |               |                 |               | 0           | •                  | 0            |                 |                     |             | 1.75              | 20               | 45             | 220                               |
| 105064            | ORANGE H5G 70 | P. O. 62        | 0                      | •               | •             | 0               |               | •           | •                  |              | •               | •                   | •           | 1.52              | 10               | 72             | 745                               |
| 104984            | ORANGE HL     | P. O. 36        |                        |                 |               |                 | •             | •           | •                  |              | •               | •                   | •           | 1.64              | 31               | 68             | 155                               |
| 104950            | ORANGE HL 70  | P. O. 36        |                        |                 |               |                 |               | •           | •                  | 0            |                 | •                   | •           | 1.62              | 14               | 64             | 395                               |
| 259606            | ORANGE HL 71  | P. O. 36        |                        |                 | 0             |                 |               | ■***        | •                  |              | 0               |                     | ■***        | 1.62              | 14               | 64             | 395                               |
| 202382            | RED HF3S      | P. R. 188       |                        |                 |               |                 | •             | •           | •                  |              | •               |                     |             | 1.47              | 22               | 74             | 145                               |
| 182673            | RED HF3S 70   | P. R. 188       | •                      | •               |               | 0               |               | •           | •                  | 0            | •               | •                   | •           | 1.49              | 13               | 72             | 255                               |
| 104971            | RED F2RK 70   | P. R. 170       | •                      | •               | •             | •               | •             | •           | •                  |              | •               |                     |             | 1.40              | 19               | 60             | 315                               |
| 105528            | RED F3RK 70   | P. R. 170       | 0                      | •               |               | •               |               | •           | •                  |              |                 |                     |             | 1.44              | 19               | 65             | 270                               |
| 216357            | RED F5RK      | P. R. 170       |                        |                 |               |                 |               | •           | •                  |              |                 |                     |             | 1.40              | 25               | 69             | 215                               |

<sup>■</sup> highly recommended & dissolver dispersible

<sup>■</sup> highly recommended

<sup>•</sup> recommended

O limited suitability

<sup>-</sup> not measurable

#### 1.2.1

### **NOVOPERM® PIGMENTS**

not standardized in paint

| PRODUCT | NOVOPERM      | COLOUR<br>INDEX | AUTOMOTIVE<br>PAINTS |                 |               |                 | INDUSTRIAL PAINTS |             |                    |              |                 |               |             | PHYSICAL DATA     |                  |                |                                   |  |
|---------|---------------|-----------------|----------------------|-----------------|---------------|-----------------|-------------------|-------------|--------------------|--------------|-----------------|---------------|-------------|-------------------|------------------|----------------|-----------------------------------|--|
|         |               |                 | OEM paints           | Refinish paints | Solvent-based | Water-base coat | Solvent-based     | Water-based | Amine-curing epoxy | Coil coating | Powder coatings | Solvent-based | Water-based | Density           | Specific surface | Oil absorption | Average size of primary particles |  |
|         |               |                 |                      |                 |               |                 |                   |             |                    |              |                 |               |             | g/cm <sup>3</sup> | m²/g             | ml/100g        | nm                                |  |
| 187853  | YELLOW 4G 01  | P. Y. 155       |                      |                 |               |                 | •                 | •           | •                  | 0            | •               |               |             | 1.45              | 38               | 75             | 115                               |  |
| 106582  | YELLOW HR 02  | P. Y. 83        |                      |                 |               |                 | •                 | •           | •                  |              | •               |               |             | 1.49              | 74               | 79             | 55                                |  |
| 118380  | YELLOW P-M3R  | P. Y. 139       |                      |                 |               |                 | •                 | •           |                    | 0            |                 |               |             | 1.65              | 60               | 55             | 75                                |  |
| 107440  | RED HFG       | P.O. 38         |                      | _               |               |                 |                   |             |                    | 0            | •               |               |             | 1.46              | 67               | 87             | 165                               |  |
| 104894  | CARMINE HF4C  | P.R. 185        |                      |                 |               |                 |                   |             |                    |              | •               |               |             | 1.48              | 52               | 90             | 165                               |  |
| 104892  | BORDEAUX HF3R | P. V. 32        |                      |                 |               |                 | •                 | •           | •                  | 0            | •               |               |             | 1.48              | 44               | 83             | 170                               |  |

<sup>■</sup> highly recommended

recommended

O limited suitability

<sup>-</sup> not measurable

## 1.3 **PERMANENT PIGMENTS**

This group comprises of pigments that vary in fastness properties. Because of their high tinctorial strength, good gloss and largely good light fastness Permanent pigments are used in industrial and decorative paint systems.

#### LITERATURE

Pattern card PI 2014 E »Pigments for the Paint Industry - Hostaperm, Novoperm, Permanent, Hansa«

| PRODUCT<br>NUMBER | PERMANENT    | COLOUR<br>INDEX | AUTOMOTIVE<br>PAINTS |                 |               |                 |               | USTR        | IAL PA             | INTS         |                 | DEC<br>RAT<br>PAIN | IVE         | PHYSICAL DATA     |                  |                |                                      |  |
|-------------------|--------------|-----------------|----------------------|-----------------|---------------|-----------------|---------------|-------------|--------------------|--------------|-----------------|--------------------|-------------|-------------------|------------------|----------------|--------------------------------------|--|
|                   |              |                 | OEM paints           | Refinish paints | Solvent-based | Water-base coat | Solvent-based | Water-based | Amine-curing epoxy | Coil coating | Powder coatings | Solvent-based      | Water-based | Density           | Specific surface | Oil absorption | Average size of<br>primary particles |  |
|                   |              |                 |                      |                 |               |                 |               |             |                    |              |                 |                    |             | g/cm <sup>3</sup> | m²/g             | ml/100 g       | nm                                   |  |
| 182674            | ORANGE RL 70 | P.O. 34         |                      |                 |               |                 |               | •           | 0                  |              |                 |                    |             | 1.43              | 30               | 68             | 150                                  |  |
| 105526            | RED FGR      | P. R. 112       |                      |                 |               |                 |               | •           | 0                  |              | 0               |                    | •           | 1.49              | 25               | 76             | 200                                  |  |
| 107456            | RED FGR 02   | P. R. 112       |                      |                 |               |                 |               | •           | 0                  |              |                 |                    | •           | 1.49              | 31               | 82             | 140                                  |  |
| 107972            | RED FGR 70   | P. R. 112       |                      |                 |               |                 | -             | •           | 0                  |              | 0               |                    |             | 1.48              | 11               | 48             | 295                                  |  |
| 104887            | BORDEAUX FRR | P. R. 12        |                      |                 |               |                 | 0             | 0           | 0                  |              |                 |                    |             | 1.37              | 25               | 70             | 95                                   |  |

<sup>■</sup> highly recommended

recommended

O limited suitability

#### 1.3.1

#### **PERMANENT PIGMENTS**

not standardized in paint

| PRODUCT<br>NUMBER | PERMANENT      | COLOUR<br>INDEX |            | TOMOT<br>NTS    | ΓIVE          |                 |               |             |                    |              |                 |               | O-<br>VE<br>ITS | PHYSICAL DATA     |                  |                |                                   |  |
|-------------------|----------------|-----------------|------------|-----------------|---------------|-----------------|---------------|-------------|--------------------|--------------|-----------------|---------------|-----------------|-------------------|------------------|----------------|-----------------------------------|--|
|                   |                |                 | OEM paints | Refinish paints | Solvent-based | Water-base coat | Solvent-based | Water-based | Amine-curing epoxy | Coil coating | Powder coatings | Solvent-based | Water-based     | Density           | Specific surface | Oil absorption | Average size of primary particles |  |
|                   |                |                 |            |                 |               |                 |               |             |                    |              |                 |               |                 | g/cm <sup>3</sup> | m²/g             | ml/100g        | nm                                |  |
| 107472            | YELLOW GG 02   | P. Y. 17        |            |                 |               |                 | 0             | 0           |                    |              | 0               |               |                 | 1.36              | 23               | 114            | 85                                |  |
| 240737            | YELLOW DHG     | P.Y. 12         |            |                 |               |                 | 0             | 0           |                    |              |                 |               |                 | 1.39              | 31               | 96             | 100                               |  |
| 107474            | YELLOW GR 01   | P. Y. 13        |            |                 |               |                 | 0             | 0           |                    |              | 0               |               |                 | 1.36              | 47               | 85             | 75                                |  |
| 240721            | LAKE RED LCLL  | P.R. 53:1       |            |                 |               |                 | 0             |             |                    |              |                 |               |                 | 1.80              | 58               | 72             | 115                               |  |
| <br>104896        | CARMINE FBB 02 | P. R. 146       |            |                 |               |                 | •             | •           | •                  |              |                 |               |                 | 1.41              | 32               | 69             | 155                               |  |

<sup>■</sup> highly recommended

recommended

O limited suitability

## 1.4 **HANSA® PIGMENTS**

The Hansa Yellow pigments are noted for very good light fastness. Use of the Hansa Red grades should be restricted to full-shade colorations. The Hansa pigments do not have adequate fastness to overpainting. They are standard pigments for air-drying paints.

#### LITERATURE

Pattern card PI 2014 E »Pigments for the Paint Industry - Hostaperm, Novoperm, Permanent, Hansa«

| PRODUCT<br>NUMBER | HANSA                        | COLOUR<br>INDEX | R AUTOMOTIVE<br>PAINTS |                 |               |                 | IND           | USTR        | IAL PA             | INTS         |                 | DEC<br>RATI<br>PAIN | VE          | PHYSICAL DATA |                  |                |                                   |  |
|-------------------|------------------------------|-----------------|------------------------|-----------------|---------------|-----------------|---------------|-------------|--------------------|--------------|-----------------|---------------------|-------------|---------------|------------------|----------------|-----------------------------------|--|
|                   |                              |                 | OEM paints             | Refinish paints | Solvent-based | Water-base coat | Solvent-based | Water-based | Amine-curing epoxy | Coil coating | Powder coatings | Solvent-based       | Water-based | Density       | Specific surface | Oil absorption | Average size of primary particles |  |
|                   |                              |                 |                        |                 |               |                 |               |             |                    |              |                 |                     |             | g/cm³         | m²/g             | ml/100 g       | nm                                |  |
| 107257            | YELLOW G 02                  | P.Y. 1          |                        |                 |               |                 | 0             | 0           | 0                  |              |                 | -                   | •           | 1.40          | 25               | 61             | 200                               |  |
| 104885            | YELLOW 10G                   | P. Y. 3         |                        |                 |               |                 | 0             | 0           | 0                  |              |                 |                     | •           | 1.58          | 11               | 59             | 405                               |  |
| 104915            | YELLOW 10G 41 GRAN.          | P. Y. 3         |                        |                 |               |                 | 0             | 0           | 0                  |              |                 | -                   | •           | 1.57          | 12               | 74             | -                                 |  |
| 159753            | BRILLIANT YELLOW 5GX         | P. Y. 74        | -                      |                 |               |                 | 0             | 0           | 0                  |              |                 |                     | •           | 1.41          | 34               | 59             | 135                               |  |
| 104968            | BRILLIANT YELLOW 4GX         | P. Y. 73        |                        |                 |               |                 | 0             | 0           | 0                  |              |                 |                     | •           | 1.48          | 21               | 59             | 200                               |  |
| 104970            | BRILLIANT YELLOW 2GX 70      | P. Y. 74        |                        |                 |               |                 | 0             | 0           | 0                  |              |                 |                     |             | 1.43          | 16               | 54             | 340                               |  |
| 167583            | BRILLIANT YELLOW 2GX<br>70-S | P.Y. 74         |                        |                 |               |                 | 0             | 0           | 0                  |              |                 | •                   |             | 1.43          | 16               | 59             | 312                               |  |
| 271730            | BRILLIANT YELLOW 2GX<br>72-S | P.Y. 74         |                        |                 |               |                 | 0             | 0           |                    |              |                 | 0                   | <b>-</b>    | 1.39          | 21               | 59             | 312                               |  |
| 107255            | RED GG                       | P. O. 5         |                        |                 |               |                 | 0             | 0           |                    |              |                 |                     | 0           | 1.55          | 12               | 59             | 285                               |  |
| 200064            | SCARLET RNC                  | P. R. 3         |                        |                 |               |                 | •             |             | •                  |              |                 | •                   |             | 1.42          | 17               | 74             | 255                               |  |
| 201224            | RED 3B                       | P. R. 3         |                        |                 |               |                 | •             |             | •                  |              |                 | •                   |             | 1.42          | 9                | <br>55         | 405                               |  |

<sup>■</sup> highly recommended & dissolver dispersible

<sup>■</sup> highly recommended

<sup>•</sup> recommended

O limited suitability

<sup>-</sup> not measurable

## 1.5 **OTHER PIGMENTS**

not standardized in paint

## 1.5.1 **PV FAST® PIGMENTS**

Highly fast organic pigments with outstanding heat resistance, light fastness and bleeding fastness in various polymers. Because of their very good heat resistance, selected pigments can be used in special paint systems after preliminary trials.

| PRODUCT<br>NUMBER | PV FAST        | COLOUR<br>INDEX | AUTOMOTIVE INDUSTRIAL PAINT PAINTS |                 |               | LINTS           |               | DEC<br>RATI<br>PAIN | VE                 | PHYS         | ICAL DA         | TA            |             |                   |                  |                     |                                   |
|-------------------|----------------|-----------------|------------------------------------|-----------------|---------------|-----------------|---------------|---------------------|--------------------|--------------|-----------------|---------------|-------------|-------------------|------------------|---------------------|-----------------------------------|
|                   |                |                 | OEM paints                         | Refinish paints | Solvent-based | Water-base coat | Solvent-based | Water-based         | Amine-curing epoxy | Coil coating | Powder coatings | Solvent-based | Water-based | Density           | Specific surface | Oil absorption      | Average size of primary particles |
|                   |                |                 |                                    |                 |               |                 |               |                     |                    |              |                 |               |             | g/cm <sup>3</sup> | m²/g             | ml/100g             | nm                                |
| 104918            | YELLOW HG      | P. Y. 180       |                                    |                 |               |                 |               |                     |                    | •            | •               |               |             | 1.46              | 28               | 98                  | 180                               |
| 107497            | YELLOW HGR     | P. Y. 191       |                                    |                 |               |                 |               |                     |                    | •            | •               |               |             | 1.71              | 20               | 79                  | 600                               |
| 104917            | YELLOW H3R     | P. Y. 181       | 0                                  | 0               | •             |                 |               |                     |                    | •            | •               |               |             | 1.48              | 27               | 118                 | 415                               |
| 106616            | ORANGE H4GL 01 | P. O. 72        |                                    |                 |               |                 |               |                     |                    | •            | •               |               |             | 1.51              | 39               | - <del> </del>      | 140                               |
| 104949            | RED B          | P. R. 149       |                                    |                 |               |                 |               |                     |                    | •            | •               |               |             | 1.40              | 56               | 66                  | 35                                |
| 104935            | BLUE A2R       | P. B. 15:1      |                                    |                 |               |                 |               |                     |                    |              | •               |               |             | 1.65              | 70               | 63                  | 40                                |
| 106313            | BLUE BG        | P. B. 15:3      |                                    |                 |               |                 |               |                     |                    |              |                 |               |             | 1.62              | 57               | - <del></del><br>61 | 95                                |

<sup>■</sup> highly recommended

<sup>•</sup> recommended

O limited suitability

# 1.5.2 **GRAPHTOL® PIGMENTS**

Graphtol pigments have lower general fastness properties than the PV Fast pigments. Selected pigments can be used for low-cost powder coating formulations after preliminary trials.

| PRODUCT<br>NUMBER | GRAPHTOL      | COLOUR     |            | TOMOT<br>NTS    | ΓIVE          | INDUSTRIAL PAINTS |               |             | DECO-<br>RATIVE<br>PAINTS |              | PHYSICAL DATA   |               |             |         |                  |                |                                      |
|-------------------|---------------|------------|------------|-----------------|---------------|-------------------|---------------|-------------|---------------------------|--------------|-----------------|---------------|-------------|---------|------------------|----------------|--------------------------------------|
|                   |               |            | OEM paints | Refinish paints | Solvent-based | Water-base coat   | Solvent-based | Water-based | Amine-curing epoxy        | Coil coating | Powder coatings | Solvent-based | Water-based | Density | Specific surface | Oil absorption | Average size of<br>primary particles |
|                   |               |            |            |                 |               |                   |               |             |                           |              |                 |               |             | g/cm³   | m²/g             | ml/100 g       | nm                                   |
| 111720            | YELLOW H2R    | P. Y. 139  |            |                 |               |                   |               |             |                           |              | 0               |               |             | 1.66    | 59               | 66             | 75                                   |
| 107509            | RED LC        | P. R. 53:1 |            |                 |               |                   |               |             |                           |              | 0               |               |             | 1.82    | 42               | 70             | 160                                  |
| 239922            | FIRE RED 3RLP | P.R. 48:3  |            |                 |               |                   |               |             |                           |              | 0               |               |             | 1.84    | 28               | 60             | 270                                  |
| 219306            | RUBINE L4B    | P. R. 57:1 |            |                 |               |                   |               |             |                           |              | 0               |               |             | 1.66    | 68               | 67             | 76                                   |

O limited suitability

#### 2

#### **NUMERICAL CODE AND SPECIAL GRADES**

21

#### NUMERICAL CODE FOR ALTERATION OF STANDARDS AND SPECIAL GRADES

In the course of improving or further developing existing pigments/pigment preparations for special fields of application or special processing methods there is a need for modified grades or special grades, which are identified by adding a two-digit number to the pigment name. Each further modification to one and the same pigment is identified by the next consecutive number.

#### **WE USE THE FOLLOWING SYSTEM:**

- O1–19 Alteration of standards and improvements to individual pigments (e.g. higher tinctorial strength, change in shade etc.).
- 30-39 Alteration of standards or improvements to pigment preparations with their own range name.
- 40-49 Pigments with improved dispersibility primarily for air-drying paints.
- 70-79 Highly opaque pigments with very good flow properties.

2.2

#### OPAQUE PIGMENTS FOR LEAD-FREE PIGMENTATIONS

**HOSTAPERM OXIDE YELLOW BV 01 HOSTAPERM OXIDE YELLOW BV 02** HANSA BRILLIANT YELLOW 2GX 70 HANSA BRILLIANT YELLOW 2GX 70-S **NOVOPERM YELLOW 5GD 71 HOSTAPERM YELLOW H4G HOSTAPERM YELLOW H4G 70 NOVOPERM YELLOW HR 70 NOVOPERM YELLOW M2R 70 NOVOPERM ORANGE H5G 70** NOVOPERM ORANGE HL 70 **PERMANENT ORANGE RL 70 PERMANENT RED FGR 70 NOVOPERM RED HF3S 70 HOSTAPERM RED D3G 70-CN HOSTAPERM RED D2G 71 HOSTAPERM RED D2G 72 NOVOPERM RED F2RK 70 NOVOPERM RED F3RK 70 HOSTAPERM RED E2B 70** 

2.3

#### TRANSPARENT PIGMENTS FOR EFFECT PAINTS

**HOSTAPERM ORANGE GR** 

**HOSTAPERM SCARLET GO** HOSTAPERM RED P2GL-WD **HOSTAPERM RED E5B 02 HOSTAPERM PINK E** HOSTAPERM PINK EB TRANSP. **HOSTAPERM RED VIOLET ER 02 HOSTAPERM VIOLET BL 01 HOSTAPERM VIOLET RL SPEC. 01 HOSTAPERM BLUE BT-728-D** HOSTAPERM BLUE BT-729-D **HOSTAPERM BLUE BT-627-D HOSTAPERM BLUE A4R** HOSTAPERM BLUE BT-617-D **HOSTAPERM BLUE B2G 03 HOSTAPERM GREEN GNX HOSTAPERM BROWN HFR 01** 

2 4

#### EASILY DISPERSIBLE (ED) PIGMENTS

HOSTAPERM YELLOW H3G 02
HANSA BRILLIANT YELLOW 2GX 72-S
NOVOPERM YELLOW HR 72
NOVOPERM ORANGE HL 71
HOSTAPERM PINK E-WD 01
HOSTAPERM BLUE B2G 03
HOSTAPERM GREEN GNX 01

### 3 PIGMENT PREPARATIONS

### 3.1 **COLANYL® 100**

Colanyl 100 is a of range of aqueos, binder-free pigment preparations that is manufactured without using alkyl phenol ethoxylated (APEO) additives. The main application fields of the Colanyl 100 range are dispersion paints and renderings/plaster based on aqueous polymer dispersions. They are also compatible with other binder systems, e.g. water-based industrial paints, but the maximum dosage

level and compatibility of the binder-free Colanyl 100 has to be checked in the customer paint system itself. By using Colanyl 100 pigment preparations in automatic and/or manual dispensers, excellent accuracy and reliability when poured or pumped have been observed. Furthermore, Colanyl 100 pigment preparations are miscible in all proportions with each other. By adding Colanyl

| PRODUCT<br>Number | COLANYL         | COLOUR INDEX PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT        | SOLIDS<br>CONTENT | WATER     | GLYCOL |
|-------------------|-----------------|----------------------|---------------------|-------------------|----------------|-------------------|-----------|--------|
|                   | _               |                      | _                   | g/cm <sup>3</sup> | — <del>—</del> | %                 | _ <u></u> | %      |
| 189173            | YELLOW 10G 132  | Yellow 3             | 11710               | 1.17              | 35             | 51                | 29        | 20     |
| 285168            | YELLOW 5GX 131  | Yellow 74            | 11741               | 1.14              | 46             | 54                | 26        | 20     |
| 304256            | YELLOW FGL 133  | Yellow 97            | 11767               | 1.12              | 38             | 52                | 30        | 18     |
| 288530            | YELLOW H3G 131  | Yellow 154           | 11781               | 1.14              | 30             | 40                | 40        | 20     |
| 211147            | YELLOW 2GXD 130 | Yellow 74            | 11741               | 1.17              | 48             | 57                | 18        | 25     |
| 211158            | YELLOW G 132    | Yellow 1             | 11680               | 1.17              | 50             | 56                | 24        | 20     |
| 292682            | YELLOW HR 131   | Yellow 83            | 21108               | 1.14              | 35             | 55                | 30        | 15     |
| 315089            | YELLOW HRD 132  | Yellow 83            | 21108               | 1.19              | 50             | 58                | 27        | 15     |
| 210058            | ORANGE G 131    | Orange 13            | 21110               | 1.17              | 40             | 47                | 36        | 17     |
| 204952            | RED GG 131      | Orange 5             | 12075               | 1.20              | 45             | 56                | 24        | 20     |
| 211159            | RED FRLL 131    | Red 9                | 12460               | 1.16              | 48             | 54                | 26        | 20     |
| 214915            | SCARLET RNX 130 | Red 3                | 12120               | 1.19              | 50             | 59                | 28        | 13     |
| 302495            | SCARLET GO 131  | Red 168              | 59300               | 1.22              | 35             | 51                | 29        | 20     |
| 87155             | RED FGRG 130    | Red 112              | 12370               | 1.18              | 47             | 53                | 21        | 26     |
| 87202             | RED FGR 131     | Red 112              | 12370               | 1.18              | 45             | 53                | 28        | 19     |
| 104988            | RED E3B 130     | Violet 19            | 73900               | 1.13              | 32             | 47                | 28        | 25     |
| 281268            | PINK E 130      | Red 122              | 73915               | 1.12              | 20             | 36                | 44        | 20     |
| 307786            | VIOLET RL 132   | Violet 23            | 51319               | 1.14              | 30             | 45                | 37        | 18     |
| 222634            | BLUE A2R 131    | Blue 15:1            | 74160               | 1.21              | 40             | 51                | 31        | 18     |
| 204924            | BLUE B2G 131    | Blue 15:3            | 74160               | 1.23              | 47             | 54                | 26        | 20     |
| 18340             | GREEN GG 131    | Green 7              | 74260               | 1.34              | 50             | 59                | 26        | 15     |
| 05141             | BLACK PR 130    | Black 7              | 77266               | 1.18              | 30             | 38                | 37        | 25     |
| 104990            | BLACK N 131     | Black 7              |                     | 1.27              | 42             | 49                | <br>31    | 20     |

Extender MS 531, the color strength of the Colanyl 100 can be adjusted. The data presented in this table is meant to provide a general indication and does not represent quality-relevant average values. The quality of our preparations is defined by the specifications of the coloristical and rheological values. The Colour Index data relate to the basic pigments.

| PRODUCT<br>NUMBER | COLANYL             | COLOUR INDEX<br>PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT    | SOLIDS<br>CONTENT | WATER | GLYCOL    |
|-------------------|---------------------|-------------------------|---------------------|-------------------|------------|-------------------|-------|-----------|
|                   | _                   |                         |                     | g/cm <sup>3</sup> | — <u> </u> | %                 | %     | <u></u> % |
| 107127            | OXIDE YELLOW BV 100 | Yellow 184              | 771740              | 2.18              | 65         | 72                | 18    | 10        |
| 312759            | OXIDE YELLOW CR 131 | Brown 24                | 77310               | 2.18              | 66         | 80                | 5     | 15        |
| 211160            | OXIDE YELLOW R 132  | Yellow 42               | 77492               | 1.98              | 66         | 73                | 9     | 18        |
| 269205            | OXIDE RED G 130     | Red 101                 | 77491               | 2.17              | 65         | 71                | 11    | 18        |
| 313602            | OXIDE RED B 132     | Red 101                 | 77491               | 2.34              | 72         |                   | 8     | 14        |
| 107120            | OXIDE BLUE COR 100  | Blue 28                 | 77346               | 1.95              | 60         | 67                | 15    | 18        |
| 118342            | OXIDE GREEN G 131   | Green 17                | 77288               | 2.56              |            | 80                | 10    | 10        |
| 312758            | OXIDE BLACK B 130   | Black 11                | 77499               | 1.90              | 50         | 62                | 18    | 20        |
| 285066            | WHITE R 130         | White 6                 | 77891               | 2.18              | 70         | 77                | 4     | 19        |

### 3.2 **COLANYL® 500**

Colanyl 500 is a range of aqueous, binder-free pigment preparations that is manufactured without using alkyl phenol ethoxylated (APEO) additives. These aqueous pigment preparations are compatible with water-based and VOC-low decorative paints<sup>1</sup>. The main application fields of the Colanyl 500 range are modern dispersion paints and renderings/plaster based on aqueous polymer dispersions.

They are also compatible with other binder systems, e.g. water-based industrial paints, but the maximum dosage level and compatibility of the binder-free Colanyl 500 has to be checked in the customer paint itself.By using Colanyl 500 pigment preparations in automatic and/or manual dispensers, excellent accuracy and reliability when poured or pumped have been observed. Furthermore, Colanyl 500 pigment preparations are miscible in all proportions with each other.

| PRODUCT<br>Number | COLANYL         | COLOUR INDEX PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT                                      | SOLIDS<br>CONTENT                      | WATER      |
|-------------------|-----------------|----------------------|---------------------|-------------------|--|--|------------|
|                   |                 |                      |                     | g/cm <sup>3</sup> | —— ———————————————————————————————————       | —— ——————————————————————————————————— | — <u> </u> |
| 311423            | YELLOW 5GX 530  | Yellow 74            | 11741               | 1.14              | 40   | <u></u><br>58                          | 42         |
| 311424            | YELLOW FGL 531  | Yellow 97            | 11767               | 1.15              | 38   | 65                                     | 35         |
| 311426            | YELLOW H3G 530  | Yellow 154           | 11781               | 1.13              | 30   | 47                                     | 53         |
| 311421            | YELLOW 2GXD 530 | Yellow 74            | 11741               | 1.19              | 41   | 61                                     | 39         |
| 311425            | YELLOW G 530    | Yellow 1             | 11680               | 1.17              | —— <u>——————————————————————————————————</u> | 64                                     | 36         |
| 311427            | YELLOW HRD 530  | Yellow 83            | 21108               | 1.18              | 50   | 69                                     | 31         |
| xxxxxx            | ORANGE H5GD 500 | Orange 62            | 11775               | 1.17              | 30   | 63                                     | 37         |
| 311416            | RED GG 531      | Orange 5             | 12075               | 1.24              | —— <u>——————————————————————————————————</u> | 67                                     | 33         |
| 311418            | SCARLET GO 532  | Red 168              | 59300               | 1.24              | 36   | 62                                     | 38         |
| 320374            | RED D3GD 532    | Red 254              | 56110               | 1.24              | 50   | 66                                     | 34         |
| 311417            | RED HF3S 530    | Red 188              | 12467               | 1.16              | 40   | 60                                     | 40         |
| 311415            | RED FGRD 530    | Red 112              | 12370               | 1.17              | 45   | 61                                     | 39         |
| 311414            | RED FGR 531     | Red 112              | 12370               | 1.20              | 47   | 70                                     | 30         |
| 311413            | RED E3B 531     | Violet 19            | 73900               | 1.14              | 30   | 59                                     | 41         |
| 311419            | PINK E 532      | Red 122              | 73915               | 1.08              | 20   | <br>56                                 | 44         |
| 311429            | PINK E-WD 531   | Red 122              | 73915               | 1.14              | 32   | <br>57                                 | 43         |
| 311430            | VIOLET RL 532   | Violet 23            | 51319               | 1.12              | 30   | 57                                     | 43         |
| 311394            | BLUE A2R 531    | Blue 15:1            | 74160               | 1.20              | 40   | 62                                     | 38         |
| 311395            | BLUE B2G 530    | Blue 15:3            | 74160               | 1.23              | 45   | 61                                     | 39         |
| 311478            | GREEN GG 531    | Green 7              | 74260               | 1.34              | 50   | 71                                     | 29         |
| 311383            | BLACK N 530     | Black 7              | 77266               | 1.28              | 43   | 63                                     | 37         |
| 311384            | BLACK N 511     | Black 7              | 77266               | 1.25              | 40   | 61                                     | 39         |

<sup>1</sup> As defined in EU directive 2004/42/EC Annex II, phase II. Colanyl Blue B2G 530 and Colanyl Violet RL 532 include up to approx. 2200 ppm VOC (Volatile Organic Compounds). All other Colanyl 500 preparations include up to approx. 800 ppm VOC (VOC-test method DIN EN ISO 17895).

VOC standards and regulations vary by location. Product specific VOC information is available to customers upon request. It is the responsibility of the coatings manufacturer to determine standard compliance and appropriate claim for their products.

By adding Colanyl Extender MS 531, the color strength of Colanyl 500 can be adjusted. The data presented in this table is meant to provide a general indication and does not represent quality-relevant average values. The quality of our preparations is defined by the specifications of the coloristical and rheological values. The Colour Index data relate to the basic pigments.

#### LITERATURE

Pattern card PI 2011 E »Colanyl 500, Hostatint 500 - For decorative paints and coatings«, Flyer PI 2005 E »Colanyl 500, Hostatint 500 - For decorative paints and coatings«

| PRODUCT<br>NUMBER | COLANYL             | COLOUR INDEX<br>PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT | SOLIDS<br>CONTENT | WATER |
|-------------------|---------------------|-------------------------|---------------------|-------------------|---------|-------------------|-------|
|                   |                     |                         |                     | g/cm <sup>3</sup> | %       | %                 | %     |
| 311411            | OXIDE YELLOW BV 531 | Yellow 184              | 771740              | 2.22              | 65      | 80                | 20    |
| 312444            | OXIDE YELLOW CR 531 | Brown 24                | 77310               | 2.19              | 65      | 78                | 22    |
| 311412            | OXIDE YELLOW R 532  | Yellow 42               | 77492               | 2.00              | 64      | 78                | 22    |
| 311410            | OXIDE RED G 531     | Red 101                 | 77491               | 2.16              | 65      | 79                | 21    |
| 311409            | OXIDE RED B 531     | Red 101                 | 77491               | 2.35              | 70      | 83                | 17    |
| 311401            | OXIDE BLUE COR 531  | Blue 28                 | 77346               | 1.96              | 62      | 79                | 21    |
| 311403            | OXIDE GREEN G 531   | Green 17                | 77288               | 2.59              | 75      | 87                | 13    |
| 311399            | OXIDE BLACK B 533   | Black 11                | 77499               | 1.80              | 53      | 71                | 29    |
| 316607            | OXIDE BLACK IR 531  | Green 17                | 77288               | 2.38              | 70      | 84                | 16    |
| 311420            | WHITE R 530         | White 6                 | 77891               | 2.04              | 65      | 82                | 18    |
| <br>311396        | EXTENDER MS 531     |                         |                     | 1.68              | 60      |                   | 22    |

### 3.3 **HOSTATINT™ 500**

Hostatint 500 is a range of aqueous, binder-free pigment preparations that is manufactured without using alkyl phenol ethoxylated (APEO) additives. These multipurpose pigment preparations are compatible with water-based and solvent-based decorative coatings, especially low VOC decorative coatings. They are also compatible with some other binder systems, e.g. water-based or solvent-based industrial paints, but the maximum dosage level and com-

patibility of the binder-free Hostatint 500 has to be checked in the customer paint system itself. By using Hostatint 500 pigment preparations in automatic and/or manual dispensers, excellent accuracy and reliability when poured or pumped have been observed. Furthermore, Hostatint 500 pigment preparations are miscible in all proportions with each other. By adding Hostatint Extender MS 532 or Hostatint Extender CC 532, the color strength of

| PRODUCT<br>NUMBER | HOSTATINT       | COLOUR INDEX<br>PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT | SOLIDS<br>CONTENT | WATER |
|-------------------|-----------------|-------------------------|---------------------|-------------------|---------|-------------------|-------|
|                   |                 |                         |                     | g/cm <sup>3</sup> | %       | %                 | %     |
| 311338            | YELLOW 12G 531  | Yellow 3                | 11710               | 1.18              | 40      | 63                | 37    |
| 311351            | YELLOW 2GXD 531 | Yellow 74               | 11741               | 1.15              | 40      | 65                | 35    |
| 311335            | YELLOW 4GX 531  | Yellow 73               | 11738               | 1.16              | 38      | 63                | 37    |
| 311352            | YELLOW FGL 532  | Yellow 97               | 11767               | 1.14              | 40      | 61                | 39    |
| 311332            | YELLOW HR 533   | Yellow 83               | 21108               | 1.09              | 15      | 57                | 43    |
| 311337            | ORANGE HLD 533  | Orange 36               | 11780               | 1.13              | 20      | 60                | 40    |
| 314412            | SCARLET GO 531  | Red 168                 | 59300               | 1.24              | 35      | 61                | 39    |
| 311334            | RED FGR 531     | Red 112                 | 12370               | 1.13              | 21      | 51                | 49    |
| 311348            | RED D3GD 532    | Red 254                 | 56110               | 1.15              | 30      | 61                | 39    |
| 310267            | PINK E 532      | Red 122                 | 73915               | 1.10              | 20      | 44                | 56    |
| 312443            | VIOLET RL 533   | Violet 23               | 51319               | 1.11              | 15      | 48                | 52    |
| 311331            | BLUE B2G 531    | Blue 15:3               | 74160               | 1.14              | 30      | 57                | 43    |
| 309386            | GREEN GG 531    | Green 7                 | 74260               | 1.18              | 30      | 61                | 39    |
| 311437            | BLACK GR 532    | Black 7                 | 77266               | 1.13              | 20      | 54                | 46    |

<sup>1</sup> As defined in EU directive 2004/42/EC Annex II, phase II. VOC standards and regulations vary by location. Product specific VOC information is available to customers upon request. It is the responsibility of the coatings manufacturer to determine standard compliance and appropriate claim for their products.

Hostatint 500 can be adjusted. The data presented in this table is meant to provide a general indication and do not represent quality-relevant average values. The quality of our preparations is defined by the specifications of the coloristical and rheological values. The Colour Index data relate to the basic pigments.

#### LITERATURE

Pattern card PI 2011 E »Colanyl 500, Hostatint 500 - For decorative paints and coatings«, Flyer PI 2005 E »Colanyl 500, Hostatint 500 - For decorative paints and coatings«

| PRODUCT<br>NUMBER | HOSTATINT           | COLOUR INDEX<br>PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT | SOLIDS<br>CONTENT | WATER |
|-------------------|---------------------|-------------------------|---------------------|-------------------|---------|-------------------|-------|
|                   |                     |                         |                     | g/cm <sup>3</sup> | %       | %                 | %     |
| 309992            | OXIDE YELLOW BV 531 | Yellow 184              | 771740              | 2.07              | 65      | 85                | 15    |
| 311347            | OXIDE YELLOW R 532  | Yellow 42               | 77492               | 1.87              | 60      | 81                | 19    |
| 313197            | OXIDE RED B 532     | Red 101                 | 77491               | 2.24              | 68      | 85                | 15    |
| 313609            | UMBER KT 532        | Mix                     | -                   | 2.03              | 65      | 96                | 4     |
| 311340            | OXIDE BLUE COR 531  | Blue 28                 | 77346               | 2.05              | 65      | 85                | 15    |
| 311343            | OXIDE GREEN CO 532  | Green 50                | 77377               | 2.06              | 65      | 89                | 11    |
| 311344            | OXIDE GREEN G 532   | Green 17                | 77288               | 2.16              | 60      | 79                | 21    |
| 311329            | OXIDE BLACK B 532   | Black 26                | 77537               | 2.34              | 70      | 92                | 8     |
| 311350            | WHITE R 531         | White 6                 | 77891               | 2.17              | 70      | 89                | 11    |
|                   |                     |                         |                     |                   |         |                   |       |
| 311336            | EXTENDER MS 532     | _                       | -                   | 1.59              | 55      | 78                | 22    |
| 311333            | EXTENDER CC 532     | -                       | _                   | 1.28              | 30      | 61                | 39    |

### 3.4 **HOSTATINT™ A 100**

The Hostatint A 100 pastes are solvent-containing pigment preparations based on a carrier resin (aldehyde resin) that was developed specially for industrial paint applications. The pastes are produced within narrow tolerances of shade and color strength allowing highly consistent paint production path with manual and automatic dispensers.

The solvent and additives are carefully selected to avoid hazardous labelling or special storage requirements associated with their flammability. Hostatint A 100 shows good compatibility and can be added in the usual amounts to virtually all types of solvent-based industrial paint systems.

| PRODUCT<br>NUMBER | HOSTATINT           | COLOUR INDEX<br>PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT | SOLIDS<br>CONTENT | SOLVENT<br>CONTENT |
|-------------------|---------------------|-------------------------|---------------------|-------------------|---------|-------------------|--------------------|
|                   |                     |                         | _                   | g/cm <sup>3</sup> | %       | %                 | %                  |
| 222428            | YELLOW A-H3G 100    | Yellow 154              | 11781               | 1.23              | 42      | 65                | 35                 |
| 222429            | YELLOW A-F2G 100    | Yellow 194              | 11785               | 1.19              | 36      | 59                | 41                 |
| 222430            | YELLOW A-HRD 100    | Yellow 83               | 21108               | 1.16              | 28      | 52                | 48                 |
| 222440            | ORANGE A-HLD 100    | Orange 36               | 11780               | 1.25              | 43      | 60                | 40                 |
| 286008            | RED A-D3GD 130      | Red 254                 | 56110               | 1.22              | 33      | 62                | 38                 |
| 183729            | PINK A-E 130        | Red 122                 | 73915               | 1.13              | 19      | 45                | 55                 |
| 285245            | RED VIOLET A-ER 130 | Violet 19               | 73900               | 1.13              | 19      | 50                | 50                 |
| 222463            | VIOLET A-RL 100     | Violet 23               | 51319               | 1.12              | 12      | 40                | 60                 |
| 222464            | BLUE A-BG 100       | Blue 15:3               | 74160               | 1.17              | 24      | 60                | 40                 |
| 285013            | GREEN A-GNX 130     | Green 7                 | 74260               | 1.22              | 23      | 50                | 40                 |
| <br>221649        | BLACK A-N 100       | Black 7                 | 77266               |                   | 21      | <br>55            | 45                 |

The Colour Index data relate to the basic pigments. The data given in the table may vary slightly because these pigment preparations are standardized in respect to tinctorial strength.

#### LITERATURE

Pattern card PI 2008 E

»Hostatint A100 – Pigment preparations«

Flyer PI 2004 E

»Hostatint A 100 – Pigment preparations«

Flyer PI 2007 E

»Highly transparent pigment preparations for solvent-based paint systems – Hostatint A 100–ST«

| PRODUCT<br>Number | HOSTATINT                  | COLOUR INDEX<br>PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT    | SOLIDS<br>CONTENT | SOLVENT<br>CONTENT |
|-------------------|----------------------------|-------------------------|---------------------|-------------------|------------|-------------------|--------------------|
|                   | _                          |                         | _                   | g/cm <sup>3</sup> | — <u> </u> | — <u> </u>        | %                  |
| 222426            | OXIDE YELLOW A-BV 100      | Yellow 184              | 771740              | 2.27              | 64         | 80                | 20                 |
| 222427            | OXIDE YELLOW A-CR 100      | Brown 24                | 77310               | 2.11              | 64         | 82                | 18                 |
| 222425            | OXIDE YELLOW A-R 100       | Yellow 42               | 77492               | 1.68              | 50         | 68                | 32                 |
| 222431            | OXIDE RED A-B 100          | Red 101                 | 77491               | 2.06              | 62         | 78                | 22                 |
| 225570            | TRANSOXIDE YELLOW A-2R 100 | Yellow 42               | 77492               | 1.48              | 39         | 66                | 34                 |
| 225444            | TRANSOXIDE RED A-G 100     | Red 101                 | 77491               | 1.59              | 40         | 67                | 33                 |
| 222465            | WHITE A-R 100              | White 6                 | 77891               | 1.90              | 59         | 79                | 21                 |
|                   |                            |                         |                     |                   |            |                   |                    |
| 279376            | YELLOW A-N4G 100-ST        | Yellow 150              | 12764               | 1.16              | 15         | 38                | 62                 |
| 289404            | RED A-P2Y 100-ST           | Red 179                 | 71130               | 1.15              | 15         | 30                | 70                 |
| 287516            | PINK A-EB 100-ST           | Red 122                 | 73915               | 1.13              | 7          | 27                | 73                 |
| 290247            | BLUE A-BTR 100-ST          | Blue 15:1               | 74160               | 1.12              | 7          | 41                | 59                 |
| 275536            | BLUE A-BTG 100-ST          | Blue 15:4               | 74160               | 1.15              | 15         | 36                | 64                 |
| 323291            | GREEN A-GMB 100-ST         | Mixture                 | n.a.                | 1.15              | 15         | 37                | 63                 |
| 289518            | BLACK A-NB 100-ST          | Black 7                 | 77266               | 1.20              | 25         | 45                | 55                 |
| 272060            | BLACK A-NY 100-ST          | Black 7                 | 77266               | 1.16              | <br>15     | 30                | 70                 |

### 3.5 **HOSTATINT™ UV**

Hostatint UV is a range of pigment preparations, which do not contain water or solvents. They are designed to work best in 100% UV systems, but are also suitable for solvent-borne UV systems. Both, the binder and the diluent (HDDA) contained in the preparations, crosslink into the coating film under UV curing conditions.

#### LITERATURE

Pattern card PI 2025 E » Colorants for radiation curing - Hostatint UV pigment preparations «

| PRODUCT<br>NUMBER | HOSTATINT UV   | COLOUR INDEX PIGMENT | COLOUR<br>INDEX NO. | PIGMENT                                | BINDER   |
|-------------------|----------------|----------------------|---------------------|--|----------|
|                   |                |                      |                     | —————————————————————————————————————— | <u> </u> |
| 279963            | YELLOW H3G     | Yellow 154           | 11781               | 42                                     | 24       |
| 286005            | RED D3GD       | Red 254              | 56110               | 35                                     | 29       |
| 290220            | RED P2GL       | Red 179              | 71130               | 22                                     | 32       |
| 289501            | BLUE BG        | Blue 15:3            | 74160               | 24                                     | 25       |
| 279962            | WHITE R        | White 6              | 77891               | 62                                     | 19       |
| 293161            | BLACK N 30     | Black 7              | 77266               | 21                                     | 40       |
| 289392            | OXIDE YELLOW R | Yellow 42            | 77492               | 43                                     | 20       |

#### 3.6 **HOSTATINT™ SA**

The Hostatint SA pastes are solvent-containing pigment preparations based on a carrier resin (short oil alkyd resin) that was developed specially for wood coatings applications. The pastes are produced within narrow tolerances of shade, colour strength and with a rheology engineered to allow a highly consistent wood stain or oil production path with manual and automatic dispensers.

The solvent and additives are carefully selected to avoid hazardous labelling or special storage requirements associated with their flammability. Hostatint A 100 shows good compatibility and can be added in the usual amounts to virtually all types of solvent-based wood treatments.

| PRODUCT<br>NUMBER | HOSTATINT SA         | COLOUR INDEX PIGMENT | COLOUR<br>INDEX NO. <sup>1</sup> | PIGMENT   | LIGHT<br>FASTNESS <sup>2</sup> |
|-------------------|----------------------|----------------------|----------------------------------|-----------|--------------------------------|
|                   | _                    |                      |                                  | <u></u> % | <del>%</del>                   |
| 321112            | BLACK N              | Black 7              | 77266                            | 30        | 8                              |
| 321123            | OXIDE YELLOW R       | Yellow 42            | 77492                            | 55        | 8                              |
| 321125            | TRANSOXIDE YELLOW 2R | Yellow 42            | 77492                            | 36        | 8                              |
| 321124            | TRANSOXIDE RED B     | Red 101              | 77491                            | 40        | 8                              |

 $<sup>^{1}</sup>$  of base pigment  $^{2}$  1% in full shade dispersion paint

### 3.7 **HOSTAFINE**®1

Hostafine is a range of aqueous, binder-free pigment preparations based on non-ionic wettig agents and is manufactured without using alkyl phenol ethoxylated (APEO) additives. They are ultra fine pigment preparations with 95% of the pigment particle size below 0.5  $\mu m$  and with no pigment particle size above 1  $\mu m$ . These preparations show high tinting strength with high transparency and brilliance.

Viscosity is low and stability against settling and skinning is excellent. Hostafine pigment preparations are especially suitable for water-based transparent wood stains. They can also be used for other applications such as aqueous emulsion paints, glass paints, water-colors, latex and water resistant inks, inks for fiber-tip finliner and roller-tip pens.

| PRODUCT<br>NUMBER | HOSTAFINE     | COLOUR INDEX<br>PIGMENT | COLOUR<br>INDEX NO. | DENSITY | PIGMENT  | GLYCOL |
|-------------------|---------------|-------------------------|---------------------|---------|----------|--------|
|                   | _             |                         | _                   | g/cm³   | <u>%</u> | %      |
| 307808            | YELLOW GR 31  | Yellow 13               | 21100               | 1.13    | 40       | 10     |
| 307803            | YELLOW HR 31  | Yellow 83               | 11741               | 1.13    | 35       | 15     |
| 307791            | RED HF3S 30   | Red 188                 | 12467               | 1.14    | 40       | 10     |
| 307796            | RED FGR 30    | Red 112                 | 12370               | 1.15    | 45       | 10     |
| 307792            | RED P2GL 30   | Red 179                 | 71130               | 1.12    | 25       | 10     |
| 307807            | RED F5RK 30   | Red 170                 | 12475               | 1.11    | 35       | 10     |
| 307758            | RUBINE F6B 31 | Red 184                 | 12467               | 1.11    | 40       | 10     |
| 307790            | MAGENTA E 30  | Red 122                 | 73915               | 1.09    | 20       | 10     |
| 307795            | VIOLET RL 30  | Violet 23               | 51319               | 1.12    | 30       | 10     |
| 307773            | BLUE B2G 30   | Blue 15:3               | 74160               | 1.18    | 40       | 10     |
| 307759            | GREEN GN 30   | Green 7                 | 74260               | 1.28    | 40       | 10     |
| 307806            | BLACK T 31    | Black 7                 | 77266               | 1.18    | 30       | 10     |
| 219508            | BLACK TS 30   | Black 7                 | 77266               | 1.22    | 33       |        |

A final evaluation in the customer system is necessary. The data presented in this table is meant to provide a general indication and do not represent quality-relevant average values. The quality of our preparations is defined by the specifications of the coloristical and rheological values. The Colour Index data relate to the basic pigments.

#### LITERATURE

Pattern card DP 7075 E
»Hostafine pigment preparations – Woodstain Shade
Library«
Flyer PI 2026 E
»Precious Wood Made Easy – Hostafine® pigment
preparations«

| PRODUCT<br>NUMBER | HOSTAFINE               | COLOUR INDEX<br>PIGMENT | COLOUR<br>INDEX NO. | DENSITY           | PIGMENT | GLYCOL                                 |
|-------------------|-------------------------|-------------------------|---------------------|-------------------|---------|--|
|                   |                         |                         |                     | g/cm <sup>3</sup> | %       | —————————————————————————————————————— |
| 311620            | TRANSOXIDE YELLOW R 331 | Yellow 42               | 77492               | 1.37              | 35      | _                                      |
| 311619            | TRANSOXIDE RED B 331    | Red 101                 | 77491               | 1.37              | 35      | -                                      |

VOC standards and regulations vary by location. Product specific VOC information is available to customers upon request. It is the responsibility of the coatings manufacturer to determine standard compliance and appropriate claim for their products.

<sup>1</sup> Hostafine Transoxide Yellow R 33 and Hostafine Transoxide Red B 33 are multipurpose pigment preparations, similar to Hostatint 500, and compatible with water-based and solvent-based low-VOC decorative coatings as defined EU directive 2004/42/EC, annex II, phase II.

### 3.8 **HOSTANOL® HW 30**

Hostanol HW 30 is a range of solid pigment preparations based on polyvinyl butyral as carrier material. It is suitable for use in alcohol containing systems, esters and glycols can be used as additional solvents. Main fields of application are highly transparent solvent-based wood stains and marker inks. Furthermore, they can be used in gravure and flexographic printing inks based on nitrocellulose and for coating aluminum foils.

#### LITERATURE

Pattern card PI 2012 E »Hostanol HW 30 - Pigment preparations«

| PRODUCT<br>Number | HOSTANOL HW 30 | COLOUR INDEX PIGMENT | COLOUR<br>INDEX NO. | PIGMENT       | LIGHT<br>FASTNESS | PARTICLE SIZE DISTRIBUTION |
|-------------------|----------------|----------------------|---------------------|---------------|-------------------|----------------------------|
|                   | _              |                      | _                   | <del></del> % |                   | d <sub>50</sub> (nm)       |
| 154345            | YELLOW HR      | Yellow 83            | 21108               | 50            | 6-7               | <u>≤75</u>                 |
| 154350            | RED HF2B       | Red 208              | 12514               | 50            | 6-7               | <u>≤75</u>                 |
| 267153            | RED F5RK       | Red 170              | 12475               | 50            | 6                 | < 250                      |
| 154340            | BLUE B2G       | Blue 15:3            | 74160               | 50            | 8                 | < 100                      |
| 154342            | BROWN HFR      | Brown 25             | 12510               | 50            | 8                 | ≤ 75                       |
| 154351            | BLACK R        | Black 7              | 77266               | 40            | 8                 | ≤ 75                       |
| 107577            | WHITE T        | White 6              | 77891               |               | 8                 | < 250                      |

### 4 DYES

### 4.1 **SAVINYL® DYES**

Savinyl powder dyes are solvent soluble metal complex dyes, with excellent solubilities in polar organic solvents like alcohols, ketones and glycol ethers, as well as good overall fastness properties. They are suitable for coloration of writing inks, wood stains, leather finish, flexographic and gravure inks and paints based on polar solvents.

| PRODUCT<br>Number | SAVINYL        | COLOUR<br>INDEX | AUTOMOTIVE PAINTS |                 |               | INDU            | STRIAL        | PAINTS      |                    |              | DECORATIVE PAINTS |               |             |
|-------------------|----------------|-----------------|-------------------|-----------------|---------------|-----------------|---------------|-------------|--------------------|--------------|-------------------|---------------|-------------|
|                   |                |                 | OEM paints        | Refinish paints | Solvent-based | Water-base coat | Solvent-based | Water-based | Amine-curing epoxy | Coil coating | Powdercoatings    | Solvent-based | Water-based |
| 213213            | YELLOW 2GLS 01 | S. Y. 79        |                   |                 |               |                 | •             |             |                    |              | 0                 |               |             |
| 103319            | YELLOW RLS     | S. Y. 83:1      |                   |                 |               |                 | •             |             |                    |              | 0                 |               |             |
| 103328            | YELLOW RLSN    | S. Y. 8 3       |                   |                 |               |                 | 0*            |             |                    |              | 0                 |               |             |
| 103324            | YELLOW 2RLS    | S.Y. 62         |                   |                 |               |                 | •             |             |                    |              | 0                 |               |             |
| 103327            | ORANGE RLS     | S. O. 41        |                   |                 |               |                 | •             |             |                    |              | 0                 |               |             |
| 103321            | ORANGE RLSE    | S.O. 62         |                   |                 |               |                 | 0*            |             |                    |              | 0                 |               |             |
| 103331            | FIRE RED 3GLS  | S.R. 124        |                   |                 |               |                 | 0*            |             |                    |              | 0                 |               |             |
| 103337            | RED 3BLS       | S.R. 91         |                   |                 |               |                 | •             |             |                    |              | 0                 |               |             |
| 103526            | PINK 6BLS      | S. R. 127       |                   |                 |               |                 | 0*            |             |                    |              | 0                 |               |             |
| 104390            | BLUE RS        | S.B. 45         |                   |                 |               |                 | O*            |             |                    |              | 0                 |               |             |
| 103330            | BLUE GLS       | S.B. 44         |                   |                 |               |                 | •             |             |                    |              | 0                 |               |             |
| 115318            | GREEN 2GLS 01  | Mixture         |                   |                 |               |                 | O*            |             |                    |              | 0                 |               |             |
| 103322            | BROWN GLS      | Mixture         |                   |                 |               |                 | •             |             |                    |              | 0                 |               |             |
| 299479            | BLACK RLSN 01  | Mixture         |                   |                 |               |                 | •             |             |                    |              | 0                 |               |             |

<sup>•</sup> recommended

O limited suitability

<sup>\*</sup> limited fastness to overpainting

# OVERVIEW ARRANGED BY COLOUR INDEX DATA (GENERIC NAME)

### 5.1 **YELLOW**

The following overview lists our pigments, pigment preparations and dyes already published in the Colour Index, arranged by their generic name. If only the generic name but not the C.I. No. is given, the product was published without details of its constitution. We would point out that identical generic names simply indicate identical chemical composition.

The application properties of colorants are however influenced to a greater or lesser extent not only by their chemical composition but also by numerous other factors such as particle size distribution, crystallinity, surface treatment, impurities etc. For this reason products having identical compositions and identical generic names may differ completely in their application properties.

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS   | PAGE                 | STANDARD RANGES PIGMENT PREPARATIONS   | PAGE   |
|------------------------------|------------------------|--|----------------------|--|--|
| PIGMENT YELLOW 1             | 11680                  | HANSA YELLOW G 02  | 10                   | COLANYL YELLOW G 132 COLANYL YELLOW G 530  | 14<br>16                                     |
| PIGMENT YELLOW 3             | 11710                  | HANSA YELLOW 10G<br>HANSA YELLOW 10G 41 GRAN.  | 10<br>10             | COLANYL YELLOW 10G 132<br>HOSTATINT YELLOW 12G 531   | 14<br>18                                     |
| PIGMENT YELLOW 12            | 21090                  | PERMANENT YELLOW DHG   | 9                    |  |  |
| PIGMENT YELLOW 13            | 21100                  | PERMANENT YELLOW GR  | 9                    | HOSTAFINE YELLOW GR 31   | 24   |
| PIGMENT YELLOW 17            | 21105                  | PERMANENT YELLOW GG 02   | 9                    |  |  |
| PIGMENT YELLOW 42            | 77492                  |  |                      | COLANYL OXIDE YELLOW R 132 COLANYL OXIDE OLIVE GS 130 COLANYL OXIDE YELLOW R 532 HOSTAFINE TRANSOXIDE YELLOW R 33 HOSTATINT OXIDE YELLOW A-R 100 HOSTATINT UV OXIDE YELLOW R HOSTATINT TRANSOXIDE YELLOW A-2R 100 HOSTATINT OXIDE YELLOW R 532 | 15<br>15<br>17<br>25<br>21<br>23<br>21<br>19 |
| PIGMENT YELLOW 73            | 11738                  | HANSA BRILLIANT YELLOW 4GX   | 10                   | HOSTATINT YELLOW 4GX 531   | 18   |
| PIGMENT YELLOW 74            | 11741                  | HANSA BRILLIANT YELLOW 5GX HANSA BRILLIANT YELLOW 2GX 70 HANSA BRILLIANT YELLOW 2GX 70-S HANSA BRILLIANT YELLOW 2GX 72-S | 10<br>10<br>10<br>10 | COLANYL YELLOW 5GX 131 COLANYL YELLOW 2GXD 130 COLANYL YELLOW 5GX 530 COLANYL YELLOW 2GXD 530 HOSTATINT YELLOW 2GXD 531  | 14<br>14<br>16<br>16<br>16                   |

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS   | PAGE             | STANDARD RANGES PIGMENT PREPARATIONS   | PAGE                                   |
|------------------------------|------------------------|--|------------------|--|--|
| PIGMENT YELLOW 83            | 21108                  | NOVOPERM YELLOW HR NOVOPERM YELLOW HR 02 NOVOPERM YELLOW HR 70 NOVOPERM YELLOW HR 72 | 6<br>7<br>6<br>6 | COLANYL YELLOW HR 131 COLANYL YELLOW HRD 132 COLANYL YELLOW HRD 530 HOSTAFINE YELLOW HR 31 HOSTATINT YELLOW HR 533 HOSTATINT YELLOW A-HRD 100 HOSTANOL HW 30 YELLOW HR | 14<br>14<br>16<br>24<br>18<br>20<br>26 |
| PIGMENT YELLOW 97            | 11767                  | NOVOPERM YELLOW FGL  | 6                | COLANYL YELLOW FGL 133<br>COLANYL YELLOW FGL 531<br>HOSTATINT YELLOW FGL 532   | 14<br>16<br>18                         |
| PIGMENT YELLOW 120           | 11783                  | NOVOPERM YELLOW H2G  | 6                |  |  |
| PIGMENT YELLOW 139           | 56298                  | GRAPHTOL YELLOW H2R<br>NOVOPERM YELLOW M2R 70<br>NOVOPERM YELLOW P-M3R               | 12<br>6<br>7     |  |  |
| PIGMENT YELLOW 150           | 12764                  |  |                  | HOSTATINT YELLOW A-N4G 100-ST  | 21                                     |
| PIGMENT YELLOW 151           | 13980                  | HOSTAPERM YELLOW H4G<br>HOSTAPERM YELLOW H4G 70                                      | 4 4              |  |  |
| PIGMENT YELLOW 154           | 11781                  | HOSTAPERM YELLOW H3G<br>HOSTAPERM YELLOW H3G 02                                      | 4 4              | COLANYL YELLOW H3G 131 HOSTATINT YELLOW A-H3G 100 COLANYL YELLOW H3G 530 HOSTATINT UV YELLOW H3G   | 14<br>20<br>16<br>22                   |
| PIGMENT YELLOW 155           | 200310                 | NOVOPERM YELLOW 4G 01<br>NOVOPERM YELLOW 5GD 71                                      | 7<br>6           |  |  |
| PIGMENT YELLOW 175           | 11784                  | HOSTAPERM YELLOW H6G   | 4                |  |  |
| PIGMENT YELLOW 180           | 21290                  | PV FAST YELLOW HG  | 11               |  |  |
| PIGMENT YELLOW 181           | 11777                  | PV FAST YELLOW H3R   | 11               |  |  |
| PIGMENT YELLOW 184           | 771740                 | HOSTAPERM OXIDE YELLOW BV 01<br>HOSTAPERM OXIDE YELLOW BV 02                         | 4 4              | COLANYL OXIDE YELLOW BV 100 COLANYL OXIDE YELLOW BV 531 HOSTATINT OXIDE YELLOW BV 531 HOSTATINT OXIDE YELLOW A-BV 100  | 15<br>17<br>19<br>21                   |
| PIGMENT YELLOW 191           | 18795                  | PV FAST YELLOW HGR   | 11               |  |  |
| PIGMENT YELLOW 194           | 11785                  | NOVOPERM YELLOW F2G<br>NOVOPERM YELLOW F2G 02  | 6                | HOSTATINT YELLOW A-F2G 100   | 20                                     |

# 5.2 **ORANGE**

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS   | PAGE | STANDARD RANGES PIGMENT PREPARATIONS                   | PAGE     |
|------------------------------|------------------------|--|------|--|----------|
| PIGMENT ORANGE 5             | 12075                  | HANSA RED GG   | 10   | COLANYL RED GG 131<br>COLANYL RED GG 531               | 14<br>16 |
| PIGMENT ORANGE 13            | 21110                  |  |      | COLANYL ORANGE G 131                                   | 14       |
| PIGMENT ORANGE 34            | 21115                  | PERMANENT ORANGE RL 70   | 8    |  |          |
| PIGMENT ORANGE 36            | 11780                  | NOVOPERM ORANGE HL<br>NOVOPERM ORANGE HL 70<br>NOVOPERM ORANGE HL 71 | 6 6  | HOSTATINT ORANGE HLD 533<br>HOSTATINT ORANGE A-HLD 100 | 18<br>20 |
| PIGMENT ORANGE 38            | 12367                  | NOVOPERM RED HFG   | 7    |  |          |
| PIGMENT ORANGE 43            | 71105                  | HOSTAPERM ORANGE GR  | 4    |  |          |
| PIGMENT ORANGE 62            | 11775                  | NOVOPERM ORANGE H5G 70   | 6    | COLANYL ORANGE H5GD 500                                | 16       |
| PIGMENT ORANGE 72            |                        | PV FAST ORANGE H4GL 01   |      |  |          |

# 5.3 **RED**

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS                | PAGE     | STANDARD RANGES PIGMENT PREPARATIONS | PAGE |
|------------------------------|------------------------|---|----------|--------------------------------------|------|
| PIGMENT RED 3                | 12120                  | HANSA SCARLET RNC<br>HANSA RED 3B       | 10<br>10 | COLANYL SCARLET RNX 130              | 14   |
| PIGMENT RED 9                | 12460                  |   |          | COLANYL RED FRLL 131                 | 14   |
| PIGMENT RED 12               | 12385                  | PERMANENT BORDEAUX FRR                  | 8        |                                      |      |
| PIGMENT RED 48:3             | 15865:3                | GRAPHTOL FIRE RED 3RLP                  | 12       |                                      |      |
| PIGMENT RED 53:1             | 15585:1                | GRAPHTOL RED LC PERMANENT LAKE RED LCLL | 12<br>9  |                                      |      |

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS  | PAGE             | STANDARD RANGES PIGMENT PREPARATIONS   | PAGE                                   |
|------------------------------|------------------------|---|------------------|--|--|
| PIGMENT RED 57:1             | 15850:1                | GRAPHTOL RUBINE L4B   | 12               |  |  |
| PIGMENT RED 101              | 77491                  |   |                  | COLANYL OXIDE RED B 132 COLANYL OXIDE RED G 130 COLANYL OXIDE RED B 531 COLANYL OXIDE RED G 531 HOSTAFINE TRANSOXIDE RED B 33 HOSTATINT OXIDE RED B 532 HOSTATINT OXIDE RED A-B 100 HOSTATINT TRANSOXIDE RED A-G 100 | 15<br>15<br>17<br>17<br>25<br>19<br>21 |
| PIGMENT RED 112              | 12370                  | PERMANENT RED FGR PERMANENT RED FGR 02 PERMANENT RED FGR 70                           | 8<br>8<br>8      | COLANYL RED FGRG 130 COLANYL RED FGR 131 COLANYL RED FGR 531 COLANYL RED FGRD 530 HOSTAFINE RED FGR 30 HOSTATINT RED FGR 531   | 14<br>14<br>16<br>16<br>24<br>18       |
| PIGMENT RED 122              | 73915                  | HOSTAPERM PINK E HOSTAPERM PINK E-WD 01 HOSTAPERM PINK EB TRANSP. HOSTAPERM PINK E-WD | 5<br>5<br>5<br>5 | COLANYL PINK E 130 COLANYL PINK E 532 COLANYL PINK E-WD 531 HOSTAFINE MAGENTA E 30 HOSTATINT PINK E 532 HOSTATINT PINK A-E 130 HOSTATINT PINK A-E 130  | 14<br>16<br>16<br>24<br>18<br>20<br>21 |
| PIGMENT RED 149              | 71137                  | PV FAST RED B   | 11               |  |  |
| PIGMENT RED 168              | 59300                  | HOSTAPERM SCARLET GO  | 4                | COLANYL SCARLET GO 131 COLANYL SCARLET GO 532 HOSTATINT SCARLET GO 531   | 14<br>16<br>18                         |
| PIGMENT RED 170              | 12475                  | NOVOPERM RED F2RK 70<br>NOVOPERM RED F3RK 70<br>NOVOPERM RED F5RK                     | 6<br>6<br>6      | HOSTAFINE RED F5RK 30<br>HOSTANOL HW 30 RED F5RK   | 24<br>26                               |
| PIGMENT RED 179              | 71130                  | HOSTAPERM RED P2GL-WD   | 4                | HOSTAFINE RED P2GL 30<br>HOSTATINT RED A-P2Y 100-ST<br>HOSTATINT UV RED P2GL   | 24<br>21<br>22                         |
| PIGMENT RED 184              | 12467                  |   |                  | HOSTAFINE RUBINE F6B 31  | 24                                     |
| PIGMENT RED 185              | 12516                  | NOVOPERM CARMINE HF4C   | 7                |  |  |
| PIGMENT RED 188              | 12467                  | NOVOPERM RED HF3S<br>NOVOPERM RED HF3S 70   | 6                | COLANYL RED HF3S 530<br>HOSTAFINE RED HF3S 30  | 16<br>24                               |
| PIGMENT RED 208              | 12514                  |   |                  | HOSTANOL HW 30 RED HF2B  | 26                                     |
| PIGMENT RED 254              | 56110                  | HOSTAPERM RED D3G 70-CN<br>HOSTAPERM RED D2G 71<br>HOSTAPERM RED D2G 72               | 4<br>4<br>4      | COLANYL RED D3GD 532 HOSTATINT RED D3GD 532 HOSTATINT RED A-D3GD 130 HOSTATINT UV RED D3GD   | 16<br>18<br>20<br>22                   |

# 5.4 **VIOLET**

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS   | PAGE                  | STANDARD RANGES PIGMENT PREPARATIONS   | PAGE                       |
|------------------------------|------------------------|--|-----------------------|--|----------------------------|
| PIGMENT VIOLET 19            | 73900                  | HOSTAPERM RED E2B 70 HOSTAPERM RED E3B HOSTAPERM RED E5B 02 HOSTAPERM RED VIOLET ER 02 | 4<br>4<br>4<br>4<br>5 | COLANYL-RED E3B 130<br>COLANYL RED E3B 531<br>HOSTATINT RED VIOLET A-ER 130  | 14<br>16<br>20             |
| PIGMENT VIOLET 23            | 51319                  | HOSTAPERM VIOLET BL 01<br>HOSTAPERM VIOLET RL SPECIAL 01                               | 5<br>5                | COLANYL VIOLET RL 132 COLANYL VIOLET RL 532 HOSTAFINE VIOLET RL 30 HOSTATINT VIOLET RL 533 HOSTATINT VIOLET A-RL 100 | 14<br>16<br>24<br>18<br>20 |
| PIGMENT VIOLET 32            | 12517                  | NOVOPERM BORDEAUX HF3R   | 7                     |  |                            |

#### 5.5 **BLUE**

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS | PAGE | STANDARD RANGES PIGMENT PREPARATIONS | PAGE |
|------------------------------|------------------------|--------------------------|------|--------------------------------------|------|
| PIGMENT BLUE 15:1            | 74160                  | HOSTAPERM BLUE A4R       | 5    | COLANYL BLUE A2R 131                 | 14   |
|                              |                        | HOSTAPERM BLUE BT-728-D  | 5    | COLANYL BLUE A2R 531                 | 16   |
|                              |                        | HOSTAPERM BLUE BT-729-D  | 5    | HOSTATINT BLUE A-BTR 100-ST          | 21   |
|                              |                        | PV FAST BLUE A2R         | 11   |                                      |      |
| PIGMENT BLUE 15:2            | 74160                  | HOSTAPERM BLUE BT-627-D  | 5    |                                      |      |
| PIGMENT BLUE 15:3            | 74160                  | HOSTAPERM BLUE B2G 03    | 5    | COLANYL BLUE B2G 131                 | 14   |
|                              |                        | PV FAST BLUE BG          | 11   | COLANYL BLUE B2G 530                 | 16   |
|                              |                        |                          |      | HOSTAFINE BLUE B2G 30                | 24   |
|                              |                        |                          |      | HOSTATINT BLUE B2G 531               | 18   |
|                              |                        |                          |      | HOSTATINT BLUE A-BG 100              | 20   |
|                              |                        |                          |      | HOSTATINT UV BLUE BG                 | 22   |
|                              |                        |                          |      | HOSTANOL HW 30 BLUE B2G              | 26   |
| PIGMENT BLUE 15:4            | 74160                  | HOSTAPERM BLUE BT-617-D  | 5    | HOSTATINT BLUE A-BTG 100-ST          | 21   |
| PIGMENT BLUE 28              | 77346                  |                          |      | COLANYL OXIDE BLUE COR 100           | 15   |
|                              |                        |                          |      | COLANYL OXIDE BLUE COR 531           | 17   |
|                              |                        |                          |      | HOSTATINT OXIDE BLUE COR 531         | 19   |

# 5.6 **GREEN**

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS | PAGE | STANDARD RANGES PIGMENT PREPARATIONS | PAGE          |
|------------------------------|------------------------|--------------------------|------|--------------------------------------|---------------|
| PIGMENT GREEN 7              | 74260                  | HOSTAPERM GREEN GNX      |      | COLANYL GREEN GG 131                 | <u></u><br>14 |
|                              |                        | HOSTAPERM GREEN GNX 01   | 5    | COLANYL GREEN GG 531                 | 16            |
|                              |                        | HOSTAPERM GREEN GNX 02   | 5    | HOSTAFINE GREEN GN 30                | 24            |
|                              |                        |                          |      | HOSTATINT GREEN GG 531               | 18            |
|                              |                        |                          |      | HOSTATINT GREEN A-GNX 130            | 20            |
| PIGMENT GREEN 17             |                        |                          |      | COLANYL OXIDE GREEN G 131            | 15            |
|                              |                        |                          |      | COLANYL OXIDE GREEN G 531            | 17            |
|                              |                        |                          |      | HOSTATINT OXIDE GREEN G 532          | 19            |
|                              |                        |                          |      | COLANYL OXIDE BLACK IR 531           | 17            |
| PIGMENT GREEN 50             | 77377                  |                          |      | HOSTATINT OXIDE GREEN CO 532         | 19            |

# 5.7 **OTHERS**

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES PIGMENTS | PAGE      | STANDARD RANGES PIGMENT PREPARATIONS   | PAGE   |
|------------------------------|------------------------|--------------------------|-----------|--|--|
| PIGMENT BROWN 24             | 77310                  | -                        |           | COLANYL OXIDE YELLOW CR 531 HOSTATINT OXIDE YELLOW A-CR 100  | 17<br>21   |
| PIGMENT BROWN 25             | 12510                  | HOSTAPERM BROWN HFR 01   | <u></u> 5 | HOSTANOL HW 30 BROWN HFR   | 26   |
| PIGMENT BLACK 7              | 77266                  |                          |           | COLANYL BLACK PR 130 COLANYL BLACK N 131 COLANYL BLACK N 530 COLANYL BLACK N 530 COLANYL BLACK N 511 HOSTAFINE BLACK T 31 HOSTAFINE BLACK TS 30 HOSTATINT BLACK GR 532 HOSTATINT BLACK A-N 100 HOSTATINT BLACK A-NB 100-ST HOSTATINT BLACK A-NY 100-ST HOSTATINT BLACK N 30 HOSTANOL HW 30 BLACK R | 14<br>14<br>16<br>16<br>24<br>24<br>18<br>20<br>21<br>21<br>23<br>26 |
| PIGMENT BLACK 11             | 77499                  |                          |           | COLANYL OXIDE OLIVE GS 130<br>COLANYL OXIDE BLACK B 130<br>COLANYL OXIDE BLACK B 533   | 15<br>15<br>17   |
| PIGMENT BLACK 26             | 77537                  |                          |           | HOSTATINT OXIDE BLACK B 532  | 19   |
| PIGMENT WHITE 6              | 77891                  |                          |           | COLANYL WHITE R 130 COLANYL WHITE R 530 HOSTATINT WHITE R 531 HOSTATINT WHITE A-R 100 HOSTATINT UV WHITE R HOSTANOL HW 30 WHITE T  | 15<br>17<br>19<br>21<br>23   |

# 5.8 **DYES**

| COLOUR INDEX<br>GENERIC NAME | COLOUR<br>INDEX<br>NO. | STANDARD RANGES<br>DYES | PAGE   |
|------------------------------|------------------------|-------------------------|--------|
| SOLVENT YELLOW 62            | -                      | SAVINYL YELLOW 2RLS     | 27     |
| SOLVENT YELLOW 79            | _                      | SAVINYL YELLOW 2GLS 01  | 27     |
| SOLVENT YELLOW 83            | _                      | SAVINYL YELLOW RLSN     | 27     |
| SOLVENT YELLOW 83:1          | _                      | SAVINYL YELLOW RLS      | 27     |
| SOLVENT ORANGE 41            | _                      | SAVINYL ORANGE RLS      | 27     |
| SOLVENT ORANGE 62            | 12714                  | SAVINYL ORANGE RLSE     | 27     |
| SOLVENT RED 91               | _                      | SAVINYL RED 3BLS        | 27     |
| SOLVENT RED 124              |                        | SAVINYL FIRE RED 3GLS   | 27     |
| SOLVENT RED 127 -            |                        | SAVINYL PINK 6BLS       | 27     |
| SOLVENT BLUE 44 -            |                        | SAVINYL BLUE GLS        | 27     |
| SOLVENT BLUE 45              |                        | SAVINYL BLUE RS         | <br>27 |



#### **HEUBACH GROUP**

Marketing And Sales Coatings Phone +49 (0) 6196 757 7981 (Germany)

de.sales@heubachcolor.com www.heubach.com

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. We make no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency, or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of our products for its particular application. \*Nothing included in this information waives any of our General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing our products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact us.

\*For sales to customers located within the United States and Canada the following applies in addition NO EXPRESS OR IMPLIED WARRANTY IS MADE OF THE MERCHANTABILITY, SUITABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE OF ANY PRODUCT OR SERVICE. 02/2022

™ Trademark

® Trademark registered in many countries

BRIGHTER COLORS.
BRIGHTER LIFE.