

VIBRANTZ PIGMENTS FOR INKS

About Vibrantz Technologies

Vibrantz Technologies is a leading global supplier of technology-based performance materials, including glass-based coatings, pigments and colors, and polishing materials. Vibrantz products are sold into the building and construction, automotive, appliances, electronics, household furnishings, and industrial products markets. The company is headquartered in Houston, Texas, USA.

Our Values and behaviors:

CUSTOMER FOCUS

Our customers are why we exist. We build relationships with internal and external customers that are built on trust, a desire to understand their needs and challenges, and a genuine interest in making them more successful.

ACCOUNTABILITY FOR PERFORMANCE

As individuals and teams, we work to achieve the highest performance standards. We prioritize safety and environmental stewardship; providing high-value solutions for our customers; and creating value for Vibrantz's shareholders.

INNOVATIVE THINKING

We encourage our associates to seek out new ideas for technologies and business processes, and to always look for ways to improve and to better serve our customers.

TEAMWORK AND COLLABORATION

We are committed to a work environment that promotes trust, mutual respect, teamwork and collaboration, and that focuses on consistently delivering value to our customers and shareholders.

BLUE

PB1 Lumiere Blue P.T.M PB15:1 Phthalocyanine Blue PB15:3 Phthalocyanine Blue **PB15:4** Phthalocyanine Blue



VIOLET

PV2 Lumiere Pink S.M PV3 Lumiere Violet P.T.M PV3:4 Lumiere Violet P.M **PV19** Quinacridone Violet **PV23** Dioxazine Violet

GREEN

PG7

PY181

Phthalocyanine Green

YELLOW

| PY3 | Monoazo Yellow |
|-------|----------------------------|
| PY13 | Diarylide Yellow |
| PY14 | Diarylide Yellow |
| PY17 | Diarylide Yellow |
| PY73 | Monoazo Yellow |
| PY74 | Monoazo Yellow |
| PY83 | Diarylide Yellow |
| PY110 | Isoindolinone Yellow |
| PY111 | Monoazo Yellow |
| PY151 | Benzimidazolone Yellow |
| PY155 | Bisacetoacetarylide Yellow |
| PY170 | Diarylide Yellow |
| | |

Benzimidazolone Yellow

organic pigments organic pigments organic pigments organic pigments

organic pigments organic pigments organic pigments organic pigments organic pigments

organic pigments

organic pigments organic pigments organic pigments organic pigments organic pigments organic pigments organic pigments organic pigments organic pigments organic pigments organic pigments organic pigments organic pigments



ORANGE

PO13

PO34

PO36

PO64

Disazopyrazolone Orange Disazopyrazolone Orange Benzimidazolone Orange Benzimidazolone Orange

RED

PR2

PR146

PR170

PR176

Naphthol AS Red PR48:1 BONA, Ba Lake Red PR48:2 BONA, Ca Lake Red PR48:3 BONA, Sr Lake Red PR48:4 BONA, Mn Lake Red PR53:1 PR81:5 Lumiere Pink S.M. **PR122** Quinacridone Red Naphthol AS Red Naphthol AS Red Benzimidazolone Red **PR184** Naphthol AS Red PR266 Naphthol AS Red

Beta Naphthol Ba Lake Red

organic pigments organic pigments organic pigments organic pigments

organic pigments organic pigments

Functional pigments

LYSOPURE RANGE **APPLICATIONS GUIDE**

vibrantz.com

PB1 • LUMIERE BLUE P.T.M

MAIN CHARACTERISTICS

- Pigment Blue 1 (C.I. 42595:2)
- Complex salts of Victoria Blue dye/heteropolyacid P.T.M.
- Used for Excellent color brillance and clarity of hue and better fastness compare Cuproferric Salt with Victoria Blue dye



RECOMMENDED PRODUCTS

Lumiere Blue PTM 0151N

Standard grade particularly designed for oil based ink. It has greenish shade. A greener version of Blue 0155N for offset inks

Lumiere Blue PTM 0153N/Lumiere Blue PTM 0155N

Standard grade particularly designed for NC solvent based ink. 0155N has a reddish shade close to Pantone Blue 072C

Lumiere Blue PTM 0154N

Standard grade particularly designed for water based ink it has the most reddish shade of PB1 Lumiere

| | 0151N | 0153N | 0154N | 0155N |
|------------------|------------------|--------------------|------------------|--------------------|
| Heat fastness | 3(1) | 3 ⁽¹⁾ | 5 ⁽¹⁾ | 3-4 ⁽¹⁾ |
| Light fastness* | 5 ⁽²⁾ | 5 ⁽²⁾ | 5 ⁽²⁾ | 5 ⁽²⁾ |
| Acid fastness | 4 ⁽¹⁾ | 5 ⁽¹⁾ | 5 ⁽¹⁾ | 4-5 ⁽¹⁾ |
| Alkali fastness | 4 ⁽¹⁾ | 3-4 ⁽¹⁾ | 4 ⁽¹⁾ | 4 ⁽¹⁾ |
| Solvent fastness | 2(1) | 2-3 ⁽¹⁾ | 2-3(1) | 3(1) |
| Alcohol fastness | 3(1) | 3 ⁽¹⁾ | 3 ⁽¹⁾ | 3-4 ⁽¹⁾ |

Resistance of Print. Light Fastness*: 20% offset ink. (1) Scale 1 to 5. (2) Scale 1 to 8.

PB15:1 • PHTHALOCYANINE BLUE

MAIN CHARACTERISTICS

- Pigment Blue 15:1 (C.I. 74160)
- Reddish blue Cu-Phthalo with α-modification, offering a good brightness
- It has excellent overall fastness properties and high level of gloss, transparency

| #1 | COMPLETE |
|-----------------------------|----------|
| DOG FC | OD |
| ROASTER CH & VEGETABLE F | |
| Net Qty 25 | Kg |

RECOMMENDED PRODUCTS

Phthalocyanine 1511C

Standard grade

Recommended for solvent based ink, UV, Screen ink

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 7-8 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: Liquid ink 8%.

PB15:3 • PHTHALOCYANINE BLUE

MAIN CHARACTERISTICS

- Pigment Blue 15:3 (C.I. 74160)
- \cdot Reddish blue Cu-Phthalo with $\beta\text{-modification}$



RECOMMENDED PRODUCTS

Phthalocyanine 1532C

Standard Universal grade suitable for offset ink and both Solvent and water based ink application, can also be used in UV curing ink system

Phthalocyanine 1533C

Standard Universal grade specially suitable for solvent based ink

Recommended for solvent based ink, UV, Screen ink

| Heat fastness | 5 (scale 1 to 5) | |
|------------------|--------------------|--|
| Light fastness** | 7-8 (scale 1 to 8) | |
| Acid fastness | 4-5 (scale 1 to 5) | |
| Alkali fastness | 5 (scale 1 to 5) | |
| Solvent fastness | 5 (scale 1 to 5) | |
| Alcohol fastness | 5 (scale 1 to 5) | |

Resistance of Print. Light Fastness**: Liquid ink 8%.

PB15:4 • PHTHALOCYANINE BLUE

MAIN CHARACTERISTICS

- Pigment Blue 15:4 (C.I. 74160)
- \cdot Reddish blue Cu-Phthalo with $\beta\text{-modification}$



| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 7-8 (scale 1 to 8) |
| Acid fastness | 4-5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: Liquid ink 8%.

RECOMMENDED PRODUCTS

Phthalocyanine 1541C

Standard Universal grade suitable for solvent based ink flexo and gravure ink syst, can also be used in UV curing ink system

Recommended for solvent based ink, UV ink

VIOLET/ organic pigments

PV2 • LUMIERE PINK S.M

MAIN CHARACTERISTICS

- Pigment Violet 2 (C.I. 45175:1)
- Complex salts of Basic Violet dye/ heteropolyacid S.M.
- Used for Excellent color brillance and clarity of hue



RECOMMENDED PRODUCTS

Lumiere Purple SM 0245N

Standard grade particularly designed for oil based ink

Shade close to pantone Purple with high Color strength and cleanness compare to competition

Can also be used in combination with red 8135N to create possible alternative to Pigment Violet 1

| Heat fastness | 4-5 (scale 1 to 5) | |
|------------------|--------------------|--|
| Light fastness** | 4 (scale 1 to 8) | |
| Acid fastness | 5 (scale 1 to 5) | |
| Alkali fastness | 4-5 (scale 1 to 5) | |
| Solvent fastness | 4 (scale 1 to 5) | |
| Alcohol fastness | 3 (scale 1 to 5) | |

VIOLET/ organic pigments

PV3 • LUMIERE VIOLET P.T.M

MAIN CHARACTERISTICS

- Pigment Violet 3 (C.I. 42535:2)
- Complex salts of Methyl Violet dye/ heteropolyacid P.T.M.
- Used for Excellent color brillance and clarity of hue and better fastness compare Cuproferric Salt with methyl violet dye

| Heat fastness | 4 (scale 1 to 5) |
|------------------|------------------|
| Light fastness** | 5 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 4 (scale 1 to 5) |
| Solvent fastness | 4 (scale 1 to 5) |
| Alcohol fastness | 4 (scale 1 to 5) |

Resistance of Print. Light Fastness**: 20% offset ink.



RECOMMENDED PRODUCTS

Lumiere Violet PTM 0345N

Standard grade particularly designed for NC Solvent based ink

Its excellent NC resistance makes it particularly appropriate for chips production...

Recommended for solvent based, offset and water based inks

PV3:4 • LUMIERE VIOLET P.M

MAIN CHARACTERISTICS

- Pigment Violet 3:4 (C.I. 42535:6)
- Complex salts of Methyl Violet dye/ heteropolyacid P.M.
- Used for Excellent color brillance and clarity of hue and better fastness compare Cuproferric Salt with methyl violet dye



RECOMMENDED PRODUCTS

Lumiere Violet RPM 0347N

Standard grade particularly designed for oil based ink Shade close to pantone Violet C

Lumiere Violet R-NC PM 0348N

Standard grade particularly designed for NC solvent based ink

| | 0348N | 0347N |
|------------------|--------------------|--------------------|
| Heat fastness | 4 ⁽¹⁾ | 3 ⁽¹⁾ |
| Light fastness* | 4 ⁽²⁾ | 6(2) |
| Acid fastness | 5 ⁽¹⁾ | 5 ⁽¹⁾ |
| Alkali fastness | 4 ⁽¹⁾ | 4-5 ⁽¹⁾ |
| Solvent fastness | 4-5 ⁽¹⁾ | 3-4 ⁽¹⁾ |
| Alcohol fastness | 4-5 ⁽¹⁾ | 3-4 ⁽¹⁾ |

Resistance of Print. Light Fastness*: 20% offset ink. (1) Scale 1 to 5. (2) Scale 1 to 8.

PV19 • QUINACRIDONE VIOLET

MAIN CHARACTERISTICS

- Pigment Violet 19 (C.I. 73900)
- Very clean bluish shade of quinacridone
- High tinting strength and good transparency with outstanding fastness properties



RECOMMENDED PRODUCTS

Lysopac Violet 1940C

Standard bluish grade (ß-modification)

Lysopac Red 1941C

Standard reddish grade (y-modification)

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks, and screen inks

| Heat fastness | 5 (scale 1 to 5) |
|------------------|------------------|
| Light fastness** | 7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |



PV23 • DIOXAZINE VIOLET

MAIN CHARACTERISTICS

- Pigment Violet 23 (C.I. 51319)
- Very clean bluish shade dioaxazine pigment
- High tinting strength and good transparency with outstanding properties



RECOMMENDED PRODUCTS

Lysopac Violet 2342C

Standard bluish version, with very good performance in solvent base ink with very good rheology performances

Lysopac Violet 2341C

More reddish version compare to 2342C suitable for waterborne ink

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks, screen...

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 6-7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PG7 • PHTHALOCYANINE GREEN

MAIN CHARACTERISTICS

- Pigment Green 7 (C.I. 74160)
- Greenish yellow shade Cu-Phthalo pigment



RECOMMENDED PRODUCTS

Phthalocyanine 0762C

Standard Universal grade suitable for both solvent and water based ink flexo and gravure ink syst, can also be used in offset ink application

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 8 (scale 1 to 8) |
| Acid fastness | 4-5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |

YELLOW / organic pigments

PY3 • MONOAZO YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 3 (C.I. 11710)
- Clean greenish yellow
- Semi-transparent version with good light fastness property
- It has the classic 10g shade with the advantage of greater intensity and gloss
- · Less stable to strong organic solvents

| Heat fastness | 3-4 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 4 (scale 1 to 5) |
| Alcohol fastness | 4-5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: 20% offset ink.

RECOMMENDED PRODUCTS

Acetanil Yellow 10 GH 0314C

Standard grade

Recommended for paste inks as well as for solvent and flexographic printing inks

YELLOW / organic pigments

PY13 • DIARYLIDE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 13 (C.I. 21100)
- Medium Yellow shade .shade close to the European Scale for Process printing
- Good tinting strength and gloss



| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 5-4 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 4-5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: 20% offset ink.

RECOMMENDED PRODUCTS

Diacetanil Yellow GR 1314C

Standard semi-transparent grade

Lysopure Yellow 1318C

High purity version (Low content in Primary Aromatic Amine)

Lysopure Yellow 1319C

High purity version (Low content in Primary Aromatic Amine)

Recommended for paste inks as well as for solvent- and water based packaging gravure and flexographic printing inks

Suitable for metal decorating inks when stoving temperature does not exceed 200°C

PY14 • DIARYLIDE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 14 (C.I. 21095)
- Greener Yellow shade compare to European scale for processing
- Good tinting strength and gloss, semi-transparent grade
- Light fastness 1 point lower Than PY13



RECOMMENDED PRODUCTS

Diacetanil Yellow AAOT 1414C

Standard semi-transparent grade

Recommended for paste inks as well as solvent or water based printing inks

| Heat fastness | 4 (scale 1 to 5) |
|------------------|------------------|
| Light fastness** | 3 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

YELLOW / organic pigments

PY17 • DIARYLIDE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 17 (C.I. 21105)
- Very Greenish diarylide shade, high transparency grade
- Good tinting strength and gloss
- Good Light & Heat fastness



RECOMMENDED PRODUCTS

Diacetanil Yellow 1715C

Standard grade

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 5-6 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PY73 • MONOAZO YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 73 (C.I. 11738)
- Shade similar to PY1 with higher transparency & good light fastness
- Semi-transparent version
- · Less stable to strong organic solvents



RECOMMENDED PRODUCTS

Acetanil Yellow 4 GH 7312C

Standard grade

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks

| Heat fastness | 3 (scale 1 to 5) |
|------------------|-------------------------|
| Light fastness** | 7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 3 (scale 1 to 5) |
| Alcohol fastness | 4 (scale 1 to 5) |

PY74 • MONOAZO YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 74 (C.I. 11741)
- Very strong, Medium Yellow shade
- Higher performance compare to yellow 73
- Less stable to strong organic solvents



| Heat fastness | 3 (scale 1 to 5) |
|------------------|---------------------------|
| Light fastness** | 6 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 3-4 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: 20% offset ink.

RECOMMENDED PRODUCTS

Acetanil Yellow 5GSH 7412C

High transparent version

Acetanil Yellow 5 GH 7414C

Semi-transparent version

Acetanil Yellow 2GO 7415C

Opaque version

Lysopure Yellow 7418C

High purity version (Low content in Primary Aromatic Amine)

Recommended for paste inks as well as for solvent and water-based packaging gravure and flexographic printing inks

PY83 • DIARYLIDE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 83 (C.I. 21108)
- Reddish Yellow shade
- High gloss & transparency with good light fastness
- Good tinting strength and suitable to create golden shade
- Good heat resistance

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 5-6 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: Liquid ink 8%.



RECOMMENDED PRODUCTS

Diacetanil Yellow 3RH 8315C

Very strong red shade, higher gloss & transparency

Diacetanil Yellow HT 8316C

Very strong red shade, higher gloss & transparency Vs 8315C

Diacetanil Yellow HTT 8318C

Highest transparency, better flow properties in SB ink

Diacetanil Yellow HTT 8317C

New high transparency, with quite better flow properties in SB ink (Alcohol/Ester based)

Diacetanil Yellow HTT 8319C

New high transparency, with better flow properties in mono-solvent SB (ACE) based inks

Especially recommended for solvent based packaging gravure and flexographic printing

Lysopac Yellow 8312S

Standard opaque grade

YELLOW / organic pigments

PY110 • ISOINDOLINONE YELLOW

MAIN CHARACTERISTICS

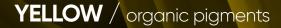
- Pigment Yellow 110 (C.I. 56280)
- Semi transparent reddish yellow
- Overall good fastness properties



RECOMMENDED PRODUCTS

Lysopac Yellow 1010C Standard grade

| Heat fastness | 5 (scale 1 to 5) |
|------------------|-------------------------|
| Light fastness** | 8 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |



PY111 • MONOAZO YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 111 (C.I. 11745)
- Very Greenish Yellow shade with higher Color strength compare to PY3
- Very good Light and weather fastness
- Less stable to strong organic solvents



RECOMMENDED PRODUCTS

Acetanil Yellow 7GT 1115C

Standard grade

Lysopure Yellow 1118C

High purity version (Low content in Primary Aromatic Amine)

Recommended for paste inks as well as for solvent and water-based packaging gravure and flexographic printing inks

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 6-7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 4 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: Liquid ink 8%.

PY151 • BENZIMIDAZOLONE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 151 (C.I. 13980)
- Semi opaque, clean greenish Yellow
- Excellent light and weather fastness properties and heat stability
- Limited alkali resistance
- Suitable for demanding application with high weather and light fastness requirement

| Heat fastness | 5 (scale 1 to 5) |
|------------------|-------------------------|
| Light fastness** | 7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 1 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: 20% offset ink.



RECOMMENDED PRODUCTS

Lysopac Yellow 5110C

Standard grade

Lysopac Yellow 5110P

Improved dispersibility

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks: e.g. laminate

PY155 • BISACETOACETARYLIDE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 155 (C.I. 11785)
- Strong greenish medium Yellow shade
- Very high tinting strength & high transparency
- Suitable for demanding application with high weather and light fastness requirement
- Excellent overall fastness properties

| Heat fastness | 5 (scale 1 to 5) |
|------------------|------------------|
| Light fastness** | 7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

RECOMMENDED PRODUCTS

Lysopac Yellow 5515C

Standard grade

Lysopure Yellow 5518P

High purity version (Low content in Primary Aromatic Amine)

Recommended for paste inks and for solvent packaging gravure and flexographic printing inks

Resistance of Print. Light Fastness**: Liquid ink 8%.

PY170 • DIARYLIDE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 170 (C.I. 21104)
- Very reddish Yellow offering high gloss
- Unique shade developed by Vibrantz
- Good dispersibility & hiding power



RECOMMENDED PRODUCTS

Lysopac Yellow 7010C

Standard opaque grade

Recommended for paste inks screen conventional and UV, metal deco and all application where opacity is needed

| Heat fastness | 5 (scale 1 to 5) |
|------------------|------------------|
| Light fastness** | 7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PY181 • BENZIMIDAZOLONE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 181 (C.I. 11777)
- Reddish medium opaque Yellow shade
- Excellent light and weather fastness properties and heat stability
- Very overall good properties



RECOMMENDED PRODUCTS

Lysopac Yellow 8113C

Standard grade

Recommended for paste inks and for solvent and water based packaging gravure and flexographic printing inks, metal deco, decorative laminate, UV curing, screen ink, sheetfed

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 7-8 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: Liquid ink 8%.

PY194 • BENZIMIDAZOLONE YELLOW

MAIN CHARACTERISTICS

- Pigment Yellow 194 (C.I. 11785)
- Strong Greenish Yellow shade
- Excellent light and weather fastness properties and heat stability
- Opaque version with high tinting strength and good rheological properties



RECOMMENDED PRODUCTS

Lysopac Yellow 9410C

Standard grade with high color strength

Recommended for paste inks and for solvent and water based packaging gravure and flexographic printing inks

| Heat fastness | 5 (scale 1 to 5) |
|------------------|-------------------------|
| Light fastness** | 6 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 4-5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 4 (scale 1 to 5) |

PO13 • DISAZOPYRAZOLONE ORANGE

MAIN CHARACTERISTICS

- Pigment Orange 13 (C.I. 21110)
- Very clean yellowish Orange shade
- Semi-transparent version with medium light fastness property



RECOMMENDED PRODUCTS

Diacetanil Orange J 1323C

Standard grade

Recommended for paste inks and for water based packaging gravure and flexographic printing inks, metal deco, UV curing, sheetfed...

| Heat fastness | 4-5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 3 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

ORANGE / organic pigments

PO34 • DISAZOPYRAZOLONE ORANGE

MAIN CHARACTERISTICS

- Pigment Orange 34 (C.I. 21115)
- Orange with a very clean shade & very bright impression
- Transparent version and very good rheology profile



| Heat fastness | 4-5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 5-6 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 4-5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

Resistance of Print. Light Fastness**: Liquid ink 8%.

RECOMMENDED PRODUCTS

Diacetanil Orange R 3426C

Standard Orange reddish shade. High gloss and transparency with a very good rheology profile Market standard

inder standard

Diacetanil Orange T 3424C

Yellowish version shade

Diacetanil Orange 3427C HTT

Improved yellowish version in term of transparency and better rheology profile

Lysopure Orange 3428C

High purity version (Low content in Primary Aromatic Amine)

Lysopac Orange 3420C

Standard opaque grade

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic

PO36 • BENZIMIDAZOLONE ORANGE

MAIN CHARACTERISTICS

- Pigment Orange 36 (C.I. 11780)
- Reddish somewhat dull orange compare to PO64 and PO34
- Good rheological behavior and good opacity
- Coloristic suitable to replace red lead molybdates

| SOFT |
|---------------------------|
| |
| Fresh up! HEXPERIENCEW |
| 0 |

RECOMMENDED PRODUCTS

Lysopac Orange 3620C

Standard grade

Lysopac Orange 3621C

A slightly more bluish grade

Recommended for paste inks, metal deco, UV curing, screen ink

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 7-8 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 4-5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PO64 • BENZIMIDAZOLONE ORANGE

MAIN CHARACTERISTICS

- Pigment Orange 64 (C.I. 12760)
- Opaque Orange shade, cleaner and higher color strength compare PO36
- Excellent light and heat stability
- Very overall good properties



RECOMMENDED PRODUCTS

Lysopure Orange 6428C

High purity version (Low content in Primary Aromatic Amine)

Recommended for paste inks and for solvent and water based packaging gravure and flexographic printing inks, metal deco, UV curing, screen ink, sheetfed

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 6 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 3-4 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PR2 • NAPHTHOL AS RED

MAIN CHARACTERISTICS

- Pigment Red 2 (C.I. 12310)
- Naphthol red with a Yellowish shade Semi-transparent grade
- Can be used as alternative to red 5315C with better end features
- Excellent Acid and alkali fastness



RECOMMENDED PRODUCTS

Naphthol Red GG 0233C

Yellowish grade

Naphthol Red G 0236C

Bluish grade

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks...

| Heat fastness | 3-4 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 5 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 3-4 (scale 1 to 5) |
| Alcohol fastness | 4-5 (scale 1 to 5) |

PR48:1 • BONA, Ba LAKE RED

MAIN CHARACTERISTICS

- Pigment Red 48:1 (C.I. 15865:1) Barium laked pigment
- Vermilion shade pigment giving high intensity, gloss and transparency
- Both in solvent -and water- based inks offers excellent rheological properties and a perfect stability of shade

| Batteries AA-4 | | | | |
|----------------|----------|----------|----------|---|
| + BATTER | + BATTER | + BATTER | H BATTER | |
| FERY | FERY | FERY | FERY | J |

RECOMMENDED PRODUCTS

Bonithol Red BG 4813C

Standard grade

Bonithol Red HTR 4814C

Higher transparency and gloss compared to Red BG 4813C

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks and metal deco...

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 3-4 (scale 1 to 8) |
| Acid fastness | 4 (scale 1 to 5) |
| Alkali fastness | 3-4 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PR48:2 • BONA, Ca LAKE RED

MAIN CHARACTERISTICS

- Pigment Red 48:2 (C.I. 15865:2) Calcium laked pigment
- Rubine shade pigment giving high intensity, gloss and transparency



RECOMMENDED PRODUCTS

Bonithol Red BB 4822C

Standard grade

Recommended for paste inks as well as for solvent gravure and flexographic printing inks, UV inks and metal deco...

| Heat fastness | 4 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 5-6 (scale 1 to 8) |
| Acid fastness | 4 (scale 1 to 5) |
| Alkali fastness | 4 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PR48:3 • BONA, Sr LAKE RED

MAIN CHARACTERISTICS

- Pigment Red 48:3 (C.I. 15865:3) Strontium laked pigment
- Semi-transparent grade, giving high intensity, gloss and transparency
- Both in solvent -and water- based inks offers excellent rheological properties and a perfect stability of shade
- Poor resistance to acid which is linked to his pigment class



RECOMMENDED PRODUCTS

Bonithol Red B 4834C

Standard grade with outstanding transparency and gloss

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks...

| Heat fastness | 4 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 4 (scale 1 to 8) |
| Acid fastness | 2-3 (scale 1 to 5) |
| Alkali fastness | 4 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PR48:4 • BONA, Mn LAKE RED

MAIN CHARACTERISTICS

- Pigment Red 48:4 (C.I. 15865:4) Manganese laked pigment
- Strong transparent bluish grade giving high intensity, gloss and transparency
- The Manganese can create some drying issue with oxidative binders

| Heat fastness | 5 (scale 1 to 5) |
|------------------|-------------------------|
| Light fastness** | 6-7 (scale 1 to 8) |
| Acid fastness | 3 (scale 1 to 5) |
| Alkali fastness | 3-4 (scale 1 to 5) |
| Solvent fastness | 4 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |



RECOMMENDED PRODUCTS

Bonithol Red BM 4846C

Bluish grade

Bonithol Red TR 4847C

Yellowish grade

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks...

PR53:1 • BETA NAPHTHOL, Ba LAKE RED

MAIN CHARACTERISTICS

- Pigment Red 53:1 (C.I. 15585:1) Barium laked pigment
- Clean yellow shade barium beta naphthol lake pigment
- It has a high transparency and high gloss, giving high intensity with good rheological properties
- Excellent rheological properties and a perfect stability of shade (in solvent, water and UV base system)

| Heat fastness | 3 (scale 1 to 5) | | | | |
|------------------|-------------------------|--|--|--|--|
| Light fastness** | 2 (scale 1 to 8) | | | | |
| Acid fastness | 3-4 (scale 1 to 5) | | | | |
| Alkali fastness | 3 (scale 1 to 5) | | | | |
| Solvent fastness | 4-5 (scale 1 to 5) | | | | |
| Alcohol fastness | 4-5 (scale 1 to 5) | | | | |

A de la de l

RECOMMENDED PRODUCTS

Lake Red 5315C

Standard grade with outstanding transparency and gloss

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks...

PR81:5 • LUMIERE PINK S.M.

MAIN CHARACTERISTICS

- Pigment Red 81:5 (C.I. 45160:4)
- Complex salts of Rhodamine dye/ heteropolyacid S.M.
- Used for Excellent color brillance and clarity of hue and better fastness compare Cuproferric Salt with rhodamine dye
- Bluish red pigment close to Pantone rhodamine red C

| Heat fastness | 4-5 (scale 1 to 5) |
|------------------|-------------------------|
| Light fastness** | 4 (scale 1 to 8) |
| Acid fastness | 4-5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 3 (scale 1 to 5) |
| Alcohol fastness | 4 (scale 1 to 5) |

Resistance of Print. Light Fastness**: Liquid ink 8%.



RECOMMENDED PRODUCTS

Lumiere Pink SM 8135N

Standard grade suitable for offset ink, solvent base and UV curing can also be used in water based ink application

Lumiere Pink SM 8136N

Slight bluish version compare to Lumiere 8135N with the same end application as 8135N

Lumiere Pink SM 8137N

Most yellowish version with the same end application as 8135N

Recommended for solvent based, offset and water based inks

PR122 • QUINACRIDONE RED

MAIN CHARACTERISTICS

- Pigment Red 122 (C.I. 73915)
- Very clean bluish shade of quinacridone red, referred to as pink or magenta
- High tinting strength and good transparency with outstanding properties



RECOMMENDED PRODUCTS

Lysopac Red 2230C

Standard grade

Lysopac Red 2231C

More bluish Version compare to 2230C

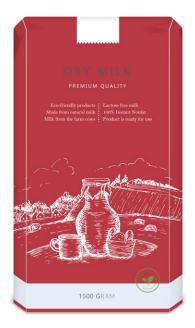
Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks, screen....

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 6-7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PR146 • NAPHTHOL AS RED

MAIN CHARACTERISTICS

- Pigment Red 146 (C.I. 12485)
- Bluish Red shade pigment used as possible lightfast magenta
- More bluish version compare to PR266 with better light fastness



RECOMMENDED PRODUCTS

Naphthol Carmine 4635C

Standard transparent bluish grade

Naphthol Carmine 4637C

Semi transparent grade for ink jet application

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks, screen, metal deco...

| Heat fastness | 5 (scale 1 to 5) | | | |
|------------------|--------------------|--|--|--|
| Light fastness** | 5-6 (scale 1 to 8) | | | |
| Acid fastness | 5 (scale 1 to 5) | | | |
| Alkali fastness | 5 (scale 1 to 5) | | | |
| Solvent fastness | 4-5 (scale 1 to 5) | | | |
| Alcohol fastness | 5 (scale 1 to 5) | | | |

PR170 • NAPHTHOL AS RED

MAIN CHARACTERISTICS

- Pigment Red 170 (C.I. 12475)
- Medium Red shade with better resistance compare to Red 2
- Semi-transparent grade from yellowish to bluish shade



RECOMMENDED PRODUCTS

Naphthol Red B 7032C

Standard semi-transparent bluish grade

Naphthol Red 7034C

More yellowish semi-transparent grade

Lysopure Red 7038C

High purity version bluish shade (Low content in Primary Aromatic Amine)

Lysopure Red 7039C

High purity version yellowish shade (Low content in Primary Aromatic Amine)

Lysopac Red 7030C

More yellowish and opaque version

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks, screen, metal deco...

| Heat fastness | 5 (scale 1 to 5) | | | |
|------------------|--------------------|--|--|--|
| Light fastness** | 6-7 (scale 1 to 8) | | | |
| Acid fastness | 5 (scale 1 to 5) | | | |
| Alkali fastness | 5 (scale 1 to 5) | | | |
| Solvent fastness | 5 (scale 1 to 5) | | | |
| Alcohol fastness | 5 (scale 1 to 5) | | | |

PR176 • BENZIMIDAZOLONE RED

MAIN CHARACTERISTICS

- Pigment Red 176 (C.I. 12515)
- Blue shade benzimidazolone pigment
- It has excellent overall fastness properties
- High level of gloss and transparency



RECOMMENDED PRODUCTS

Carmine HT 7635C

Standard grade

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks, screen, and metal deco

| Heat fastness | 5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 6-7 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PR184 • NAPHTHOL AS RED

MAIN CHARACTERISTICS

- Pigment Red 184 (C.I. 12487)
- Bluish Red shade pigment used also as possible lightfast magenta
- Most bluish version with overall properties close to PR 146 and better Light fastness compare to PR147

| ///// 100% PROFESSIONAL WHEY PROTEIN 246 |
|---|
| |

| RECOMMENDED PR | <i>NODUCTS</i> |
|-----------------------|-----------------------|
|-----------------------|-----------------------|

Naphthol Carmine 6B 8435C

Standard transparent bluish grade

Lysopure Red 8438C

High purity version (Low content in Primary Aromatic Amine)

Lysopure Red 8439C

High purity version (Low content in Primary Aromatic Amine)

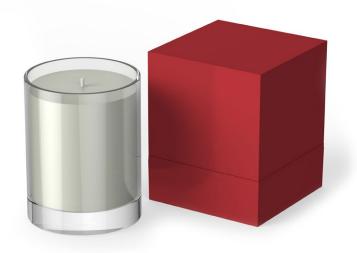
Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks, screen...

| Heat fastness | 4-5 (scale 1 to 5) |
|------------------|--------------------|
| Light fastness** | 5-6 (scale 1 to 8) |
| Acid fastness | 5 (scale 1 to 5) |
| Alkali fastness | 5 (scale 1 to 5) |
| Solvent fastness | 4-5 (scale 1 to 5) |
| Alcohol fastness | 5 (scale 1 to 5) |

PR266 • NAPHTHOL AS RED

MAIN CHARACTERISTICS

- Pigment Red 266 (C.I. 12474)
- Bluish Red shade compare to PR170
- Transparent grade with overall properties similar to PR170



RECOMMENDED PRODUCTS

Naphthol Red 4B 7035C

Standard transparent bluish grade

Naphthol Red 4B 7036C

Standard grade for Ink jet application

Recommended for paste inks as well as for solvent and water based packaging gravure and flexographic printing inks, UV inks, screen, metal deco...

| Heat fastness | 5 (scale 1 to 5) | | | |
|------------------|--------------------|--|--|--|
| Light fastness** | 4-5 (scale 1 to 8) | | | |
| Acid fastness | 5 (scale 1 to 5) | | | |
| Alkali fastness | 5 (scale 1 to 5) | | | |
| Solvent fastness | 4-5 (scale 1 to 5) | | | |
| Alcohol fastness | 5 (scale 1 to 5) | | | |

LYSOPURE RANGE

LYSOPURE'S HIGH CHEMICAL PURITY HELPS KEEP FOOD PACKAGING SAFE

Primary aromatic amines (PAA) occur as contaminants in azo pigments and may pose a health risk if they migrate into food from colored food contact materials such as packaging and napkins. Numerous international regulations exist including the European Union regulation (No 10/2011) and the Swiss ordinance on materials and articles (817.023.21), have been implemented specifically to prohibit the release of PAAs into food in detectable quantities.

To minimize this risk of potential exposure to harmful substances subject to migration, Vibrantz has developed the Lysopure high purity line of organic pigments for use in indirect food contact packaging.

The range of pure pigments used in Vibrantz Lysopure is based on a strict selection of raw materials, advanced processing techniques, and an internal quality control process performed on every batch. Only those food contact materials listed as approved substances are used; each batch is systematically checked for PAA, polychlorinated biphenyl (PCB), and non-intentionally added substances (NIAS) in the pigment content.

PLENTY OF COLOR POSSIBILITIES

Lysopure is currently available in eight different color Indexes ranging from greenish-yellow to bluish red, allowing for full coverage of the color spectrum.

In addition to excellent aesthetic effects, the high purity profile of Lysopure pigments allows Vibrantz's customers the following advantages:

- Meet more stringent and ever-evolving regulations in terms of possible migration.
- Give their customers a secure statement regarding the inks being used, as PAA content is monitored and only approved additives are implemented.

Lysopure is ideal for use in tissue ink and bakery paper. It can also be used in any application in which the purity profile is of concern, such as indirect food contact packaging, finger paints, non-woven materials, and other plastic applications.

PRODUCTS

- **PY13**: Lysopure Yellow 1318C & 1319C
- PY74: Lysopure Yellow 7418C
- PY111: Lysopure Yellow 1118C

- PY155: Lysopure Yellow 5518P
- **PO34**: Lysopure Orange 3428C
- PO64: Lysopure Orange 6428C
- **PR170**: Lysopure Red 7038C & 7039C
- **PR184**: Lysopure Red 8438C & 8439C



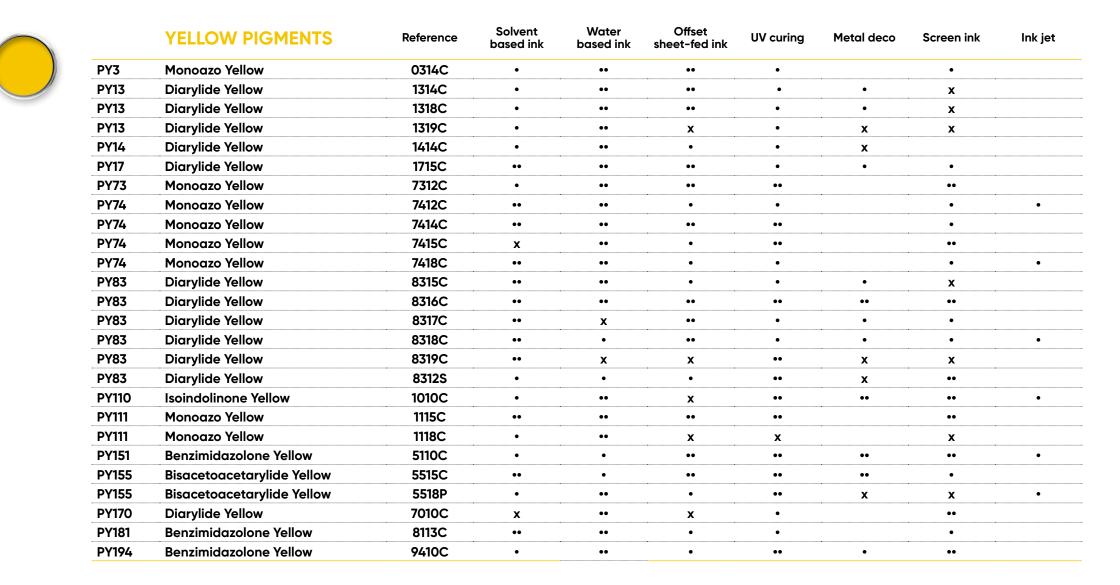
| | BLUE PIGMENTS | Reference | Solvent based ink | Water based ink | Offset sheet-fed ink | UV curing | Metal deco | Screen ink | Ink jet |
|--------|----------------------|-----------|----------------------|--------------------|-------------------------|-----------|------------|------------|---------|
| PB1 | Lumiere Blue P.T.M | 0151N | X | x | •• | •• | | X | |
| PB1 | Lumiere Blue P.T.M | 0153N | •• | x | • | • | | x | |
| PB1 | Lumiere Blue P.T.M | 0154N | X | •• | • | ٠ | | X | |
| PB1 | Lumiere Blue P.T.M | 0155N | •• | •• | •• | •• | | x | |
| PB15:1 | Phthalocyanine Blue | 1511C | • | •• | x | •• | x | •• | |
| PB15:3 | Phthalocyanine Blue | 1532C | • | • | •• | •• | •• | •• | |
| PB15:3 | Phthalocyanine Blue | 1533C | •• | • | X | • | X | •• | |

| | VIOLET PIGMENTS | Reference | Solvent based ink | Water based ink | Offset sheet-fed ink | UV curing | Metal deco | Screen ink | Ink jet |
|-------|----------------------|-----------|----------------------|--------------------|-------------------------|-----------|------------|------------|---------|
| PV2 | Lumiere Pink S.M | 0245N | • | • | •• | • | | x | |
| PV3 | Lumiere Violet P.T.M | 0345N | •• | ٠ | •• | •• | | x | |
| PV3:4 | Lumiere Violet P.T.M | 0347N | • | X | •• | •• | | x | |
| PV3:4 | Lumiere Violet P.M | 0348N | •• | • | • | •• | | x | |
| PV19 | Quinacridone Violet | 1940C | • | • | • | • | x | • | |
| PV19 | Quinacridone Violet | 1941C | • | • | • | • | x | • | |
| PV23 | Dioxazine Violet | 2341C | • | •• | •• | •• | •• | • | |



| | GREEN PIGMENTS | Reference | Solvent based ink | Water based ink | Offset sheet-fed ink | UV curing | Metal deco | Screen ink | Ink jet |
|-----|-----------------------|-----------|----------------------|--------------------|-------------------------|-----------|------------|------------|---------|
| PG7 | Phthalocyanine Green | 0762C | • | •• | •• | • | •• | •• | |







| | ORANGE PIGMENTS | Reference | Solvent based ink | Water based ink | Offset sheet-fed ink | UV curing | Metal deco | Screen ink | Ink jet |
|------|-------------------------|-----------|----------------------|--------------------|-------------------------|-----------|------------|------------|---------|
| PO13 | Disazopyrazolone Orange | 1323C | •• | •• | •• | •• | • | | |
| PO34 | Disazopyrazolone Orange | 3420C | • | •• | •• | •• | • | •• | |
| PO34 | Disazopyrazolone Orange | 3424C | •• | •• | •• | •• | x | X | |
| PO34 | Disazopyrazolone Orange | 3426C | •• | •• | •• | •• | x | x | |
| PO34 | Disazopyrazolone Orange | 3427C | •• | •• | • | •• | x | x | • |
| PO34 | Disazopyrazolone Orange | 3428C | •• | •• | •• | •• | x | x | |
| PO36 | Benzimidazolone Orange | 3620C | • | •• | x | •• | •• | •• | |
| PO64 | Benzimidazolone Orange | 6428C | • | •• | •• | •• | •• | • | • |



| | RED PIGMENTS | Reference | Solvent based ink | Water based ink | Offset sheet-fed ink | UV curing | Metal deco | Screen ink | Ink jet |
|--------|----------------------------|-----------|----------------------|--------------------|-------------------------|-----------|------------|------------|---------|
| PR2 | Naphthol AS Red | 0233C | •• | •• | •• | •• | | | |
| PR2 | Naphthol AS Red | 0236C | • | •• | • | • | | | |
| PR48:1 | BONA, Ba Lake Red | 4813C | •• | •• | • | •• | • | x | |
| PR48:1 | BONA, Ba Lake Red | 4814C | •• | •• | •• | •• | •• | x | |
| PR48:2 | BONA, Ca Lake Red | 4822C | •• | x | •• | •• | •• | X | |
| PR48:3 | BONA, Sr Lake Red | 4834C | ٠ | •• | •• | •• | x | X | |
| PR48:4 | BONA, Mn Lake Red | 4846C | •• | x | •• | •• | •• | •• | |
| PR48:4 | BONA, Mn Lake Red | 4847C | •• | x | •• | •• | x | •• | |
| PR53:1 | Beta Naphthol, Ba Lake Red | 5315C | • | •• | •• | •• | •• | x | |
| PR81:5 | Lumiere Pink S.M. | 8135N | •• | • | •• | •• | | | |
| PR81:5 | Lumiere Pink S.M. | 8136N | •• | • | • | •• | | | |
| PR81:5 | Lumiere Pink S.M. | 8137N | •• | • | • | •• | | | |
| PR122 | Quinacridone Red | 2230C | •• | •• | •• | •• | • | •• | |
| PR122 | Quinacridone Red | 2231C | •• | •• | •• | •• | • | •• | |
| PR146 | Naphthol AS Red | 4635C | •• | •• | •• | •• | • | •• | • |
| PR146 | Naphthol AS Red | 4637C | •• | •• | x | • | • | • | • |
| PR170 | Naphthol AS Red | 7030C | •• | •• | • | •• | • | •• | |
| PR170 | Naphthol AS Red | 7032C | •• | •• | •• | •• | •• | •• | |
| PR170 | Naphthol AS Red | 7034C | •• | •• | •• | •• | • | •• | |
| PR170 | Naphthol AS Red | 7038C | •• | •• | •• | •• | •• | •• | |
| PR170 | Naphthol AS Red | 7039C | • | •• | • | • | X | X | |
| PR176 | Benzimidazolone Red | 7635C | •• | •• | • | •• | •• | • | |
| PR184 | Naphthol AS Red | 8435C | •• | • | •• | •• | • | •• | |
| PR184 | Naphthol AS Red | 8438C | • | •• | •• | •• | • | • | |
| PR184 | Naphthol AS Red | 8439C | • | •• | • | • | x | • | |
| PR266 | Naphthol AS Red | 7035C | •• | •• | • | •• | x | •• | |
| PR266 | Naphthol AS Red | 7036C | •• | x | x | •• | x | x | • |

•• Highly recommended • Recommended x limited suitability (no data) Not recommended or not tested

4/4

The information and recommendations contained herein are based on data we believe to be reliable and does not imply any warranty or performance guarantee, as conditions and methods of use of our products are beyond our control. The data herein is determined using Vibrantz's standard test methods. Hazard and safety information with respect to this product is available in the applicable SDS. Vibrantz will not be liable under any circumstance for consequential or incidental damages, including but not limited to, lost profits resulting from the use of our products.



