

BRTD: bidirectional reflectance and texture data

. **BASF:** BASF pigments, screen printing

. . **MA98:** multi-angle spectrophotometer MA98 of X-Rite

. . . **LAMBDA:** wavelength, 1x31 double matrix (31 wavelengths (400 nm: 10 nm: 700 nm))

. . . **OMEGA:** direction (incidence direction , reflection direction), 19x6 double matrix (19 geometries

(45as-15, 45as15, 45as25, 45as45, 45as75, 45as110, 15as-15, 15as15, 15as-45, 15as45, 15as80,

45as25az90, 45as25az-90, 45as60az125, 45as60az-125, 15as38.3az43, 15as38.3az-43,

15as46.9az104.5, 15as46.9az-104.5), 6 angles (incidence elevation angle θ_i , incidence azimuth angle

ϕ_i , reflection elevation angle θ_r , reflection azimuth angle ϕ_r , in-plane aspect angle θ_{as} , at-specular azimuth angle ϕ_{az})

. . . **BO90C0Z:** Black Olive 90C0Z, 6 μm – 48 μm , 19.2 %

. . . **F9G630L:** Firemist Blue 9G630L, 5 μm – 300 μm , 19.2 %

. . . **F9G680D:** Firemist Colormotion Blue Topaz 9G680D, 13 μm – 180 μm , 19.2 %

. . . **F9G480D:** Firemist Colormotion Ruby 9G480D, 13 μm – 180 μm , 19.2 %

. . . **F9G230L:** Firemist Gold 9G230L, 5 μm – 300 μm , 19.2 %

. . . **F9G830L:** Firemist Green 9G830L, 5 μm – 300 μm , 19.2 %

. . . **F9G130L:** Firemist Pearl 9G130L, 5 μm – 300 μm , 19.2 %

. . . **F9G430L:** Firemist Red 9G430L, 5 μm – 300 μm , 19.2 %

. . . **F9G730L:** Firemist Turquoise 9G730L, 5 μm – 300 μm , 19.2 %

. . . **F9G530L:** Firemist Violet 9G530L, 5 μm – 300 μm , 19.2 %

. . . **G9S130D:** Glacier Frost White 9S130D, 8 μm – 45 μm , 19.2 %

. . . **L9A30D:** Lumina Aqua Blue 9A30D, 8 μm – 48 μm , 19.2 %

. . . **L9232D:** Lumina Brass 9232D, 8 μm – 48 μm , 19.2 %

. . . **L9359D:** Lumina Copper 9359D, 8 μm – 48 μm , 19.2 %

. . . **L9Y30D:** Lumina Gold 9Y30D, 8 μm – 48 μm , 19.2 %

. . . **L9G30D:** Lumina Green 9G30D, 8 μm – 48 μm , 19.2 %

. . . **L9R30D:** Lumina Red 9R30D, 8 μm – 48 μm , 19.2 %

. . . **L9680H:** Lumina Royal Blue 9680H, 8 μm – 48 μm , 19.2 %

. . . **L9450D:** Lumina Russet 9450D, 8 μm – 48 μm , 19.2 %

. . . **L9T30D:** Lumina Turquoise 9T30D, 8 μm – 48 μm , 19.2 %

. . . **SF9332D:** Santa Fe Desert Blush 9332D, 8 μm – 48 μm , 19.2 %

. . . **SF9832D:** Santa Fe Kiwi 9832D, 8 μm – 48 μm , 19.2 %

. . . **WGCP:** white glossy coated paper, LuxoMagic, Sappi, 150g/m²

. . . **BUCP:** black uncoated paper, PopSet, Arjo Wiggins, 120g/m²

. . . . **MA98:** multi-angle spectrophotometer MA98 of X-Rite

. **C:** color (D65/10°), 19x5 double matrix (19 geometries (45as-15, 45as15, 45as25, 45as45,

45as75, 45as110, 15as-15, 15as15, 15as-45, 15as45, 15as80, 45as25az90, 45as25az-90,

45as60az125, 45as60az-125, 15as38.3az43, 15as38.3az-43, 15as46.9az104.5, 15as46.9az-104.5),

5 values (lightness L*, green-red value a*, blue-yellow value b*, chroma C*, hue angle h°))

. **R:** reflectance, 19x31 double matrix (19 geometries (45as-15, 45as15, 45as25, 45as45, 45as75,

45as110, 15as-15, 15as15, 15as-45, 15as45, 15as80, 45as25az90, 45as25az-90, 45as60az125.3,

45as60az-125.3, 15as38.3az43, 15as38.3az-43, 15as46.9az104.5, 15as46.9az-104.5),

31 wavelengths (400 nm: 10 nm: 700 nm))

. . **MERCK:** MERCK pigments, flexo printing

. . . **ARGon3:** robot-based gonioreflectometer ARGon³ of PTB

. . . . **LAMBDA:** wavelength λ , 1x486 double matrix (486 wavelengths (363 nm: 1 nm: 848 nm))

. . . . **OMEGA:** direction ω (incidence direction ω_i , reflection direction ω_r), 270x4 (270 geometries,

4 angles (incidence elevation angle θ_i , incidence azimuth angle ϕ_i , reflection elevation angle θ_r , reflection azimuth angle ϕ_r))

. . . . **BYKmac:** multi-angle spectrophotometer BYK-mac of BYK-Gardner

. . . . **LAMBDA:** wavelength λ , 1x35 double matrix (35 wavelengths (380 nm: 10 nm: 720 nm))

. . . . **OMEGA:** direction ω (incidence direction ω_i , reflection direction ω_r), 6x6 double matrix

(6 geometries (45as-15, 45as15, 45as25, 45as45, 45as75, 45as110), 6 angles (incidence elevation angle θ_i , incidence azimuth angle ϕ_i , reflection elevation angle θ_r , reflection azimuth angle ϕ_r , in-plane aspect angle θ_{as} , at-specular azimuth angle ϕ_{az}))

. **I123:** Iridin 123 Bright Lustre Satin, silver white pigment, 5 μm – 25 μm , 25 %

. **I103:** Iridin 103 Rutil Sterling Silver, silver white pigment, 10 μm – 60 μm , 25 %

. **I153:** Iridin 153 Flash Pearl, silver white pigment, 20 μm – 100 μm , 25 %

. **I323:** Iridin 323 Royal Gold Satin, gold pigment, 5 μm – 25 μm , 25 %

. **I305:** Iridin 305 Solar Gold, gold pigment, 10 μm – 60 μm , 25 %

. **I300:** Iridin 300 Gold Pearl, gold pigment, 10 μm – 60 μm , 25 %

. **I520:** Iridin 520 Bronze Satin, iron oxide pigment, 5 μm – 25 μm , 25 %

- . . **I4504**: Iridin 4504 Lava Red, iron oxide pigment, 5 µm – 50 µm, 25 %
- . . **I500**: Iridin 500 Bronze, iron oxide pigment, 10 µm – 60 µm, 25 %
- . . **I201**: Iridin 201 Rutil Fine Gold, interference effect pigment, 5 µm – 25 µm, 25 %
- . . **I211**: Iridin 211 Rutil Fine Red, interference effect pigment, 5 µm – 25 µm, 25 %
- . . **I221**: Iridin 221 Rutil Fine Blue, interference effect pigment, 5 µm – 25 µm, 25 %
- . . **I231**: Iridin 231 Rutil Fine Green, interference effect pigment, 5 µm – 25 µm, 25 %
- . . **I205**: Iridin 205 Rutil Platinum Gold, interference effect pigment, 10 µm – 60 µm, 25 %
- . . **I215**: Iridin 215 Rutil Red Pearl, interference effect pigment, 10 µm – 60 µm, 25 %
- . . **I225**: Iridin 225 Rutil Blue Pearl, interference effect pigment, 10 µm – 60 µm, 25 %
- . . **I235**: Iridin 235 Rutil Green Pearl, interference effect pigment, 10 µm – 60 µm, 25 %
- . . **CF1000**: Colorstream F1000 Autumn Mystery, multi-color pigment, 5 µm – 50 µm, 20 %
- . . **CT1001**: Colorstream T1001 Viola Fantasy, multi-color pigment, 5 µm – 50 µm, 20 %
- . . **CT1002**: Colorstream T1002 Arctic Fire, multi-color pigment, 5 µm – 50 µm, 20 %
- . . **CT1003**: Colorstream T1003 Tropic Sunrise, multi-color pigment, 5 µm – 50 µm, 20 %
- . . **CT1004**: Colorstream T1004 Lapis Sunlight, multi-color pigment, 5 µm – 50 µm, 20 %
- . . **CT1005**: Colorstream T1005 Pacific Lagoon, multi-color pigment, 10 µm – 60 µm, 20 %
- . . **CT1006**: Colorstream T1006 Royal Damask, multi-color pigment, 10 µm – 60 µm, 20 %
- . . **M5311**: Miraval 5311 Scenic White, sparkle pigment, 10 µm – 100 µm, 15 %
- . . **M5320**: Miraval 5320 Scenic Gold, sparkle pigment, 10 µm – 100 µm, 15 %
- . . **M5321**: Miraval 5321 Scenic Copper, sparkle pigment, 10 µm – 100 µm, 15 %
- . . **M5325**: Miraval 5325 Scenic Turquoise, sparkle pigment, 10 µm – 100 µm, 15 %
- . . **WGCP**: white glossy coated paper, LumiArt, Stora Enso, 120 g/m²
- . . **WMCP**: white matte coated paper, LumiSilk, Stora Enso, 120 g/m²
- **UVS**: unvarnished surface, without clear gloss varnish
- **GVS**: glossy varnished surface, with clear gloss varnish
- **WPB**: white paper background, without black absorption ink
- **BPB**: black printed background, with black absorption ink
- **ARGon3**: robot-based gonioreflectometer ARGon³ of PTB
- **C**: color (standard illuminant D65, standard observer 10°), 270x5 double matrix (270 geometries, 5 values (lightness L*, green-red value a*, blue-yellow value b*, chroma C*, hue angle h°))
- **R**: reflectance, 270x486 double matrix (270 geometries, 486 wavelengths (363 nm: 1 nm: 848 nm))
- **BYKmac**: multi-angle spectrophotometer BYK-mac of BYK-Gardner
- **C**: color (standard illuminant D65, standard observer 10°), 6x5 double matrix (6 geometries (45as-15, 45as15, 45as25, 45as45, 45as75, 45as110), 5 values (lightness L*, green-red value a*, blue-yellow value b*, chroma C*, hue angle h°))
- **R**: reflectance, 6x35 double matrix (6 geometries (45as-15, 45as15, 45as25, 45as45, 45as75, 45as110), 35 wavelengths (380 nm: 10 nm: 720 nm))
- **S**: sparkle, 3x3 double matrix (3 geometries (15/0, 45/0, 75/0), 3 values (sparkle area A, sparkle intensity I, sparkle grade G))
- **G**: graininess, 1x1 double matrix (1 geometry D/0)