

L.F. : *Lightfastness*  
 ★★★ : *Very good lightfastness*  
 ★★ : *Good lightfastness*  
 ★ : *Average lightfastness*  
 o : *Poor lightfastness*

O : *Opaque*  
 T : *Transparent*  
 S/O : *Semi-opaque*

| Name                         | N°  | Pigments     | L.F. | O/T | Chemical Composition                      | F. | O.M. | N.G. | R. |
|------------------------------|-----|--------------|------|-----|---|----|------|------|----|
| Flake White                  | 108 | PW1          | ★★   | S/O | Basic lead carbonate                      | Y  | Y    | Y    | N  |
| Lithopone White              | 128 | PW5          | ★★★  | S/O | Zinc sulfide, barium sulfate              | Y  | Y    | Y    | Y  |
| Marly White                  | 131 | PW18         | ★★★  | S/O | Natural chalk carbonate                   | Y  | Y    | Y    | Y  |
| Titanium White               | 116 | PW6          | ★★★  | O   | Titanium oxide                            | Y  | Y    | Y    | Y  |
| Zinc White                   | 119 | PW4          | ★★★  | S/O | Zinc oxide                                | N  | Y    | Y    | Y  |
| Primary Blue                 | 385 | PB15         | ★★★  | S/O | Phthalocyanine blue, minerals             | N  | Y    | Y    | Y  |
| Azur (Hue)                   | 320 | PB15         | ★★★  | S/O | Phthalocyanine blue, minerals             | N  | Y    | Y    | Y  |
| Cerulean Blue Sub.           | 323 | PB15         | ★★★  | S/O | Phthalocyanine blue, minerals             | N  | Y    | Y    | Y  |
| Cerulean Blue                | 305 | PB35         | ★★★  | O   | Cobalt stannate                           | Y  | Y    | Y    | Y  |
| Cobalt Blue                  | 307 | PB72         | ★★★  | T   | Cobalt aluminate                          | Y  | Y    | Y    | Y  |
| Indigo Blue                  | 308 | PB60         | ★★★  | S/O | Indanthrone blue                          | N  | Y    | Y    | Y  |
| Cobalt Blue Deep             | 309 | PB74         | ★★★  | S/O | Cobalt aluminate                          | Y  | Y    | Y    | Y  |
| Cobalt Blue Turquoise        | 341 | PB36         | ★★★  | S/O | Cobalt stannate                           | Y  | Y    | Y    | Y  |
| Phthalocyanine Blue          | 387 | PB15         | ★★★  | T   | Phthalocyanine blue                       | N  | Y    | Y    | Y  |
| Ultramarine Blue Light       | 312 | PB29         | ★★★  | T   | Silico aluminate of sodium polysulfides   | Y  | Y    | Y    | Y  |
| Ultramarine Blue Deep        | 315 | PB29         | ★★★  | T   | Silico aluminate of sodium polysulfides   | Y  | Y    | Y    | Y  |
| Prussian Blue                | 318 | PB27         | ★★★  | T   | Ferric Ferrocyanide                       | N  | Y    | Y    | Y  |
| Primary Yellow               | 574 | PY1 PY3      | ★★   | S/O | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Bright Yellow                | 511 | PY1 PR4      | ★★   | S/O | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Cadmium Yellow Light Sub.    | 539 | PY1 PY3      | ★★   | S/O | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Cadmium Yellow Deep Sub.     | 543 | PY1          | ★★   | S/O | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Cadmium Lemon Yellow Sub.    | 545 | PY1 PY3      | ★★   | S/O | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Cadmium Yellow Medium Sub.   | 541 | PY1          | ★★   | S/O | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Cadmium Orange Yellow Sub.   | 547 | PY1 PR4      | ★★   | S/O | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Cadmium Lemon Yellow         | 535 | PY35         | ★★★  | O   | Cadmium sulfide                           | Y  | Y    | Y    | Y  |
| Cadmium Yellow Light         | 529 | PY35         | ★★★  | O   | Cadmium sulfide                           | Y  | Y    | Y    | Y  |
| Cadmium Yellow Deep          | 533 | PY35         | ★★★  | O   | Cadmium sulfide                           | Y  | Y    | Y    | Y  |
| Cadmium Yellow Medium        | 531 | PY35         | ★★★  | O   | Cadmium sulfide                           | Y  | Y    | Y    | Y  |
| Cadmium Orange Yellow        | 537 | PO20         | ★★★  | O   | Cadmium sulfide, cadmium selenide         | Y  | Y    | Y    | Y  |
| Chrome Yellow Light          | 549 | PY34         | ★★   | O   | Lead Chromate                             | N  | Y    | Y    | N  |
| Chrome Yellow Deep           | 551 | PY34         | ★★   | O   | Lead Chromate                             | N  | Y    | Y    | N  |
| Lemon Yellow                 | 501 | PY3          | ★★   | T   | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Indian Yellow Sub.           | 517 | PY1 PY83     | ★★   | T   | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Mars Yellow                  | 505 | PY1 PB7      | ★★   | T   | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Naples Yellow Sub.           | 567 | PY1          | ★★   | O   | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Nickel Yellow                | 576 | PY53         | ★★★  | O   | Nickel titanate                           | Y  | Y    | Y    | Y  |
| Alizarin Scarlet Lake        | 694 | PR48 :2 PY83 | ★★   | T   | Mononitrogenous "azo" pigments, extenders | N  | Y    | Y    | Y  |
| Alizarin Red Lake            | 696 | PR83         | ★★   | T   | Antraquinone                              | N  | Y    | Y    | Y  |
| Solferino Lake (Tyrian Rose) | 697 | PR173        | o    | T   | Xanthene lake                             | N  | Y    | Y    | Y  |
| Black Lake                   | 763 | PBk1         | ★    | T   | Black aniline                             | N  | Y    | Y    | a. |
| Ivory Black                  | 755 | PBk9         | ★★★  | O   | Bone black                                | N  | Y    | Y    | Y  |
| Black for Fresco             | 761 | PBk6/7       | ★★★  | S/O | Carbon black                              | Y  | Y    | Y    | Y  |
| Mars Black                   | 759 | PBk11        | ★★★  | O   | Synthetic iron oxide                      | Y  | Y    | Y    | Y  |
| Yellow Ochre                 | 252 | PY43         | ★★★  | T   | Natural earth                             | Y  | Y    | Y    | Y  |
| Red Ochre                    | 259 | PR102        | ★★★  | O   | Natural earth                             | Y  | Y    | Y    | Y  |
| Brown Ochre                  | 255 | PB7 PG7      | ★★★  | S/O | Natural earth, Phthalocyanine green       | N  | Y    | Y    | Y  |
| Primary Red                  | 686 | PV19         | ★★★  | S/O | Quinacridone violet                       | N  | Y    | Y    | Y  |

F : Suitable for fresco  
O.M. : Suitable for oil binders (oils, alkyds, resins...)  
G.N. : Suitable for natural gums (water)  
R. : Suitable for acrylic resins, vinyls (water)

N : No  
Y : Yes  
a. : Avoid  
n.a. : Not applicable

| Name                          | N°  | Pigments   | L.F. | O/T  | Chemical Composition                                    | F | O.M. | N.G. | R. |
|-------------------------------|-----|------------|------|------|---|---|------|------|----|
| Cadmium Red Light Sub.        | 613 | PR4        | ★★   | S/O  | Mononitrogenous "azo" pigments, extenders               | N | Y    | Y    | Y  |
| Cadmium Red Orange Light Sub. | 615 | PR4 PY1    | ★★   | S/O  | Mononitrogenous "azo" pigments, extenders               | N | Y    | Y    | Y  |
| Cadmium Red Purple Light Sub. | 617 | PR3        | ★★   | S/O  | Mononitrogenous "azo" pigments, extenders               | N | Y    | Y    | Y  |
| Cadmium Red Light             | 605 | PR108      | ★★★  | O    | Cadmium sulfide, cadmium selenide                       | Y | Y    | Y    | Y  |
| Cadmium Red Deep              | 606 | PR108      | ★★★  | O    | Cadmium sulfide, cadmium selenide                       | Y | Y    | Y    | Y  |
| Cadmium Red Orange            | 609 | PO20       | ★★★  | O    | Cadmium sulfide, cadmium selenide                       | Y | Y    | Y    | Y  |
| Cadmium Red Purple            | 611 | PR108      | ★★★  | O    | Cadmium sulfide, cadmium selenide                       | Y | Y    | Y    | Y  |
| Permanent Red Deep            | 603 | PR3 PR48:2 | ★★   | T    | Mononitrogenous "azo" pigments, extenders               | N | Y    | Y    | Y  |
| Helios Red                    | 619 | PR3        | ★★   | T    | Mononitrogenous "azo" pigments, extenders               | N | Y    | Y    | Y  |
| Mars Red                      | 631 | PR101      | ★★★  | S/O  | Synthetic iron oxide                                    | Y | Y    | Y    | Y  |
| Venetian Red                  | 623 | PR101      | ★★★  | O    | Synthetic iron oxide                                    | Y | Y    | Y    | Y  |
| Quinacridone Red              | 679 | PR122      | ★★★  | T    | Quinacridone red  | N | Y    | Y    | Y  |
| Chinese Vermilion Sub.        | 677 | PR3        | ★★   | O    | Mononitrogenous "azo" pigments, extenders               | N | Y    | Y    | Y  |
| French Vermilion Sub.         | 675 | PR4 PY1    | ★★   | O    | Mononitrogenous "azo" pigments, extenders               | N | Y    | Y    | Y  |
| Brown Madder                  | 471 | PBr23 PY42 | ★★★  | S/O  | Mononitrogenous "azo" pigments, iron oxide, extenders   | N | Y    | Y    | Y  |
| Red Brown                     | 405 | PR101 PBr7 | ★★★  | O    | Iron oxide  | Y | Y    | Y    | Y  |
| Van Dyck Brown                | 407 | PBr8       | ★★   | O    | Manganese brown   | Y | Y    | Y    | a. |
| Raw Umber                     | 205 | PBr7       | ★★★  | S/O  | Natural earth   | Y | Y    | Y    | Y  |
| Burnt Umber                   | 202 | PBr7       | ★★★  | S/O  | Natural earth   | Y | Y    | Y    | Y  |
| Raw Sienna                    | 208 | PBr7       | ★★★  | T    | Natural earth   | Y | Y    | Y    | Y  |
| Burnt Sienna                  | 211 | PBr7       | ★★★  | T    | Natural earth   | Y | Y    | Y    | Y  |
| Green Earth                   | 213 | PG23       | ★★★  | T    | Natural earth   | Y | Y    | Y    | Y  |
| English Green Light           | 805 | PY74 PG7   | ★★★  | S/O  | Mononitrogenous "azo" pigments Phtalocyanine green      | N | Y    | Y    | Y  |
| English Green Deep            | 807 | PG36       | ★★★  | S/O  | Phtalocyanine green, extenders                          | N | Y    | Y    | Y  |
| Baryte Green                  | 821 | PY32 PY31  | ★★★  | O    | Barium chromate, strontium                              | N | Y    | a.   | a. |
| Cobalt Green Light            | 833 | PG19       | ★★★  | O    | Cobalt oxide, zinc                                      | Y | Y    | Y    | a. |
| Cobalt Green Deep             | 835 | PG19       | ★★★  | O    | Cobalt oxide, zinc                                      | Y | Y    | Y    | a. |
| Emerald Green Sub.            | 869 | PG7        | ★★★  | S/O  | Phtalocyanine green, extenders                          | N | Y    | Y    | Y  |
| Emerald Green                 | 837 | PG18       | ★★★  | T    | Chromium oxide (hydrated)                               | Y | Y    | Y    | Y  |
| Chromium Oxide Green          | 815 | PG17       | ★★★  | O    | Chromium oxide  | Y | Y    | Y    | Y  |
| Veronese Green                | 847 | PG36 PY3   | ★★★  | T    | Phtalocyanine green, monoazo yellow pigments, extenders | N | Y    | Y    | Y  |
| Phtalocyanine Green           | 896 | PG7        | ★★★  | T    | Phtalocyanine green                                     | N | Y    | Y    | Y  |
| Cobalt Violet Deep            | 909 | PV14       | ★★★  | O    | Cobalt phosphate  | Y | Y    | a.   | a. |
| Mineral Violet                | 915 | PV16       | ★★★  | T    | Manganese phosphate                                     | N | Y    | a.   | a. |
| Ultramarine Violet            | 916 | PV15       | ★★★  | T    | Silico aluminate of sodium                              | Y | Y    | Y    | Y  |
| Copper                        | 36  | none       | ★★   | n.a. | Powdered metal alloys                                   | N | Y    | a.   | Y  |
| Red Gold                      | 40  | none       | ★★   | n.a. | Powdered metal alloys                                   | N | Y    | a.   | Y  |
| Yellow Gold                   | 30  | none       | ★★   | n.a. | Powdered metal alloys                                   | N | Y    | a.   | Y  |
| Iridescent                    | 20  | none       | ★★★  | n.a. | Mica, titanium dioxide                                  | N | Y    | Y    | Y  |
| Phosphorescent                | 10  | none       | n.a. | n.a. | Phosphorescent pigments                                 | N | Y    | Y    | Y  |
| Fluorescent Yellow            | 502 | none       | o    | n.a. | Fluorescent pigment                                     | N | Y    | Y    | Y  |
| Fluorescent Orange            | 648 | none       | o    | n.a. | Fluorescent pigment                                     | N | Y    | Y    | Y  |
| Fluorescent Red               | 604 | none       | o    | n.a. | Fluorescent pigment                                     | N | Y    | Y    | Y  |
| Fluorescent Pink              | 654 | none       | o    | n.a. | Fluorescent pigment                                     | N | Y    | Y    | Y  |
| Fluorescent Green             | 895 | none       | o    | n.a. | Fluorescent pigment                                     | N | Y    | Y    | Y  |
| Fluorescent Blue              | 304 | none       | o    | n.a. | Fluorescent pigment                                     | N | Y    | Y    | Y  |

*These descriptions are merely suggestions ; Sennelier cannot be held responsible for results obtained.*