

PRODUCT INFORMATION

Pantone® Matching System

Since 1963 the PANTONE[®] Matching System has developed to the standard in terms of colour communication. The colour guides are available as PANTONE[®] Formula Guide C for coated and PANTONE[®] Formula Guide U for uncoated material. Despite identical recipes in both guides, it was not observed whether the colour shades can optically be evaluated as identical. Concerning the arrangement of colours, pure ink mixings are in the middle of the guide. Further up the shades are brightened with transparent white, further down black ink is added – therefore darkened. The Pantone[®] Formula Guide ink mixing system consists of 13 basic inks, black and transparent white.

INK DESCRIPTION / FASTNESSES BASIC INKS

| | | Light Fastness | Sprit | Nitro | Alkali | Opacity | Lye resistant | UV-varnishable | Dispvarnishable | Film laminating |
|------------------------------------|---------|----------------|-------|-------|--------|---------|---------------|----------------|-----------------|-----------------|
| Pantone [®] Yellow | 62100 | 5 | + | + | + | I | + | + | + | + |
| Pantone [®] Yellow 012 | 62109 | 5 | + | + | + | Ι | + | + | + | + |
| Pantone [®] Orange 021 | 62110 | 5 | + | + | + | I | + | + | + | + |
| Pantone [®] Warm Red | 62101 | 3 | + | + | - | Ι | - | - | - | - |
| Pantone [®] Red 032 | 62111 | 6-7 | + | + | + | Ι | + | + | + | + |
| Pantone [®] Rubine Red | 62102 | 5 | + | + | - | Ι | - | bd | bd | bd |
| Pantone [®] Rhodamine Red | 62103 | 4 | - | - | - | Ι | - | - | - | - |
| Pantone [®] Purple | 62104 | 4 | - | - | - | I | - | - | - | - |
| Pantone [®] Violet | 62113 | 4 | - | - | - | Ι | - | - | - | - |
| Pantone [®] Blue 072C | 62112 | 5 | - | - | - | Ι | - | - | - | - |
| Pantone [®] Reflex Blue | 62105 | 3 | - | - | + | Ι | + | - | - | - |
| Pantone [®] Process Blue | 62106 | 8 | + | + | + | Ι | + | + | + | + |
| Pantone [®] Green | 62107 | 8 | + | + | + | I | + | + | + | + |
| Pantone [®] Black | 51100 | 8 | + | + | + | d | + | + | + | + |
| Pantone [®] Mixing White | 80973/1 | | + | + | + | I | + | + | + | + |

Looking at the stated fastness properties it can be seen that not all suggested recipes in the PANTONE[®] Formula Guides have the necessary fastnesses for e.g. lamination, UV varnishing or label printing. Basically we recommend using inks with all fastnesses for every kind of print finishing. Should this not be possible, we urgently advise a practical test. In order to produce inks of the PANTONE[®] Matching System also with jobrequired fastnesses, the usage of basic inks with special fastnesses is necessary:

| INK DESC | RIPTION / | FAS | TNESS | SES E | BASIC | INK | S – | | | |
|--|--|----------------|-------------------------|-------|--------|--------------------|---------------|----------------|-----------------|-----------------|
| | | Light Fastness | Sprit | Nitro | Alkali | Opacity | Lye resistant | UV-varnishable | Dispvarnishable | Film laminating |
| Yellow | 81190/1 | 6 | + | + | + | ld | + | + | + | + |
| Orange | 81191/1 | 6 | + | + | + | | + | + | + | + |
| Red | 119225 | 6 | + | + | + | Ι | + | + | + | + |
| Pink | 81192/1 | 6 | + | + | + | I | + | + | + | + |
| Violet | 81195/1 | 7 | + | + | + | | + | + | + | + |
| Red | 119221 | 5 | + | - | + | ld | bd | bd | + | bd |
| Fastness properties according to: Lightfastness: Solvent Mixture/Nitro: Lye resistance/Laugenbeständigkeit: | ISO 2835:19 ISO 2836 DIN 16524-7 | | Alcohol/S Alcali/Alc | - | | 60 2836 60 2836 | | | | |

When using these inks it has to be considered that due to the pigments with higher fastness, slight differences in colour shade or metamerism effects cannot always be avoided. The inks of this system already include dryer.

AUXILIARIES -

| Nr. | Dosage | |
|------|-----------------------------------|--|
| 452 | max. 3 % | |
| 058 | max. 3 % | |
| 2001 | max. 3 % | |
| 1526 | max. 2 % | |
| 420 | max. 3 % | |
| 071 | max. 5 % | |
| | 452 058 2001 1526 420 | 452 max. 3 % 058 max. 3 % 2001 max. 3 % 1526 max. 2 % 420 max. 3 % |

This technical instruction sheet is designed for your information and reference. It is based on and conforms to our current knowledge. However as actual application is affected by many factors over which we have no control, we are not liable for printing failures.