



# TECHNICAL DATA SHEET

Date: 20.03.2019, Version: 5

<b>Range name :</b>
<b>TEMPO COLOUR 2</b>
<b>Description :</b>
Vegetable based basic ink system for sheetfed offset printing. The inks are intended to be used as such or mixed together in order to reproduce specific shades. The series does not contain any petroleum derivatives and no cobalt salt.
<b>Application Fields / Market :</b>
All types of packaging and commercial jobs needing specific shades such as Pantone® shades or others
<b>Product safety:</b>
Food packaging, pharma, or hygiene: <b>NO *</b> * If the printing processing conditions rule out the possibility of set-off in the reel or stack and the design of the final printed article ensures reliable functional barrier properties to migration then this range can be used for the above applications.  For further information, please refer to <b>Siegwerk's Customer Guidance: Printing Inks for Food Packaging ("Know How")</b> on <a href="https://www.siegwerk.com/en/our-responsibility/product-responsibility/customer-communications/food-packaging-safety.html">https://www.siegwerk.com/en/our-responsibility/product-responsibility/customer-communications/food-packaging-safety.html</a>
<b>Substrates:</b>
Coated papers Matt and semi-matt coated papers Uncoated pigmented and sizing papers Recycled papers All kinds of board
<b>Features - Performances:</b>
⇒ <b><u>ON THE PRESS SIDE</u></b> <ul style="list-style-type: none"> <li>➤ Easy to use: very good stability and water / ink balance</li> <li>➤ Suitable for all dampening systems with or without alcohol</li> <li>➤ High speed runnability</li> <li>➤ Duct fresh, overnight</li> <li>➤ Inks remain very stable on the rollers</li> </ul>
⇒ <b><u>ON THE PRINTING SIDE</u></b> <ul style="list-style-type: none"> <li>➤ Good gloss level</li> <li>➤ High colour intensity, allowing ink consumption reduction</li> <li>➤ Quick setting speed, final oxidative drying</li> <li>➤ Over-printability and lamination (see fastness on the next page)</li> <li>➤ Good rub resistance</li> </ul>



**Warning :**

**PAY ATTENTION TO:**

- Some shades are not suitable for overprinting with water based and UV varnishes, or lamination.
- Due to ink and varnish layers and storage conditions, some chemical reactions may occur and cause colour damage. In this case, we recommend to use resistant inks (see overprinting ability in the below tables)
- The use of an IR drier or warm air will improve the setting and the gloss but it is recommended to respect 30°C maximum in the stack.
- These inks have a shelf life of 2 years from the date of production. This has to be interpreted as a warranty of "the best use" concerning the printing properties of the inks, providing the cans are not opened and stored at room temperature. After this date the inks are still usable on the press but their printing properties could eventually be altered in terms of transfer, trapping, optical density and to a certain extend in term of shade by consequence of the transfer.
- For toy applications, please contact our technical department.

**Auxiliary printing additives :**

When certain substrates or machine conditions imply adjustments of the ink properties, the additives should be chosen in function of this substrate and of the further processing of the printed matter.

Role	Designation	References numbers	Proportions
Thinner	Diluent	61-470295-9	1 to 3 %
Tack reducer	Stargel	61-470080-5	2 to 4%

For Fountain additives and Cleaning products please contact our technical department.

**Packing size:**

✓ Vacuum Metallic Tins                      2.5 kg                      Packaging code                      1200



**The range :**

- The range is divided in 2 categories:
- Basic inks to reproduce Pantone Matching System® (PMS) shades
  - Resistant bases for jobs needing either a light fastness or being intended to be overprinted with WB or UV coating or laminated

**-THE BASIC INK RANGE FOR REPRODUCTION OF PANTONE® SHADES (PMS)**

In order to help the printers to reach the right PMS shade when they blend themselves, we have prepared a tool grouping all exact recipes of each PMS shade. The tool can be delivered either through an Excel file or through a spectrophotometer colour file. Please ask your SIEGWERK contact.

Colours	References numbers	Fastness				Overprinting	
		IWS (*)	Alcohol	Solvent	Alkali	UV or lamination	Water based
Yellow	61-302560-0	5	5	4	5	Yes	Yes
Orange 021	61-700168-0	5	5	4	5	Yes	Yes
Warm red	61-802711-4	3	3	2	2	No	No
Red 032	61-802738-7	5	5	3	5	Yes	Yes
Rubine red	61-802759-3	5	5	5	3	Yes	Yes
Rhodamine	61-802760-1	4	1	1	2	No	No
Purple	61-100430-0	4	1	1	2	No	No
Violet	61-100431-8	4	3	2	3	No	No
Blue 072	61-116636-4	4	2	3	3	No	No
Reflex blue	61-129704-5	3	2	3	5	No	No
Process blue	61-116640-6	8	5	5	5	Yes	Yes
Green	61-500346-4	8	5	5	5	Yes	Yes
Neutral black	61-902902-8	8	5	5	5	Yes	Yes
Transparent white	61-000120-8	-	5	5	5	Yes	Yes

**- THE RESISTANT BASE RANGE**

Colours	References Numbers	Fastness				Overprinting	
		IWS (*)	Alcohol	Solvent	Alkali	UV or lamination	Water based
Fast Yellow	61-302562-6	6-7	5	3	5	Yes	Yes
Fast Rubine	61-802745-2	5-6	5	3	5	Yes	Yes
Fast Red	61-802736-1	6	5	5	5	Yes	Yes
Fast Rhodamine (Pink)	61-802762-7	7	5	5	5	Yes	Yes
Fast Violet (Medium purple)	61-100429-2	7	4	4	5	Yes	Yes
Fast Reflex blue (Dark blue)	61-116633-1	7	4	4	5	Yes	Yes
Opaque white	61-010520-7	7	5	5	5	Yes	Yes

( \* ) Light fastness value refers to a solid printing but it may decrease when colour strength is reduced or if colours are mixed together.

This information is based on our experience and on results obtained in the laboratory, using specific processes and types of application. In view of the diversity of substrates and printing conditions, this data is communicated for information purposes only and is provided without any warranty on our part and must be authenticated by industrial tests before the products are used. Improvements are being made to our products on an ongoing basis and we therefore reserve the right to modify their composition as well as the contents of our technical data sheets. We disclaim any liability for applications for which this ink series is not foreseen.