

# TECHNICAL DATA SHEET

Date: 31.03.2017, Version: 2

Range name :

## TEMPO METAL DEC

Description :

Complete range of vegetable based sheetfed offset inks for metal decoration printing.  
**TEMPO METAL DEC** is available in process inks and concentrated bases.  
 The bases can be used for straight printing or for blending.

Application Fields / Market :

All types of 3-pieces and 2-pieces metal packaging except aluminum 2-pieces cans for beverages.  
 Suitable for industrial, decoration, body care and food packaging applications.

Product safety:

### Intended Use

Food packaging (incl. pharma and hygiene) : YES

### Compliance Management

These inks are only suitable for use on the non-food-contact side of food packaging, provided that they are applied using the relevant Good Manufacturing Practices (a system for ensuring that products are consistently produced and controlled according to quality standards) and according to the guidelines in this Technical Data Sheet.  
 The printer, converter and the packer/filler each have a responsibility to ensure that the finished - printed - article is fit for the intended purpose(s) and that the ink and coating components do not migrate into the food at levels that exceed legal, regulatory and industry defined requirements.

Please refer to Siegwirk's "**Statement of Composition**" for further regulatory information.

In case of specific applications, please contact your technical application service.

For further information, please refer to **Siegwerk's Customer Guidance: Printing Inks for Food Packaging ("Know How")** on <https://www.siegwerk.com/en/our-responsibility/product-responsibility/customer-communications/food-packaging-safety.html>

The recipes of the **TEMPO METAL DEC** series are optimized in order to minimize the risks of odour contamination and migration. However, due to the potential application of internal/external varnishes, some set-off risks are existing. It is the responsibility of the converter to verify this point prior to any finished product marketing.

Note that set-off and migration are dependent on the processing conditions such as efficiency of the oven, thickness of the ink layer, barrier efficiency of the inner varnish, etc...

You will produce a safe packaging material if you observe good printing practices and restrictions as outlined in the Technical Information mentioned above. In particular, these inks are not approved for direct contact with food, separated from it or not by a varnish layer

**TEMPO METAL DEC** formula does not contain the following:

- Basic dye complex ("fanal") pigments and barium-organic pigments with high bleeding tendency,
- Mineral oils
- Alkylbenzenes
- Hydroquinone and ketoxime antidriers
- Cobalt driers

In case of migration analysis, our technical department will disclose the list of potential migrating species.





**The range :**

• **PROCESS INKS**

Colours	References	IWS (1)	Alcohol	Solvent	Alkali	Sterilization 1h30 - 130°C Immersion (1)	Heat resistance 12 mn - °C (1)
Yellow	60-300420-1	5	5	5	5	Yes	180
Magenta	60-800833-0	5	5	5	5	Yes	180
Cyan	60-110688-3	8	5	5	5	Yes	200
Deep Black	60-900274-6	8	5	5	5	Yes	200

We do not recommend to use above process inks for mixing system

• **MIXING SYSTEM**

Colours	References	IWS (1)	Alcohol	Solvent	Alkali	Sterilization 1h30 - 130°C Immersion (1)	Heat resistance 12 mn - °C (1)
Yellow	61-302659-0	5	5	5	5	Yes	180
Fast Yellow	61-302660-8	7	5	5	5	Yes	220
Orange	61-701279-4	5	5	4	5	Yes	180
Fast Orange	61-701280-2	6	5	5	5	Yes	220
Fast Warm red	61-804798-9	7	5	5	5	Yes	200
Rubine Red	61-805459-7	5	5	5	5	Yes	180
Fast Carmin	61-800885-8	7	5	5	5	Yes	220
Rhodamine	61-805458-9	7	5	5	5	Yes	180
Violet	61-101255-0	7	4	4	5	Yes	180
Reflex Blue	61-110742-6	7	5	5	5	Yes	180
Process Blue	61-113923-9	7	5	5	5	Yes	200
Green	61-502453-6	8	5	5	5	Yes	200
Neutral black	61-902368-2	7	5	5	5	Yes	200
Transparent white	61-003884-6	/	5	5	5	Yes	200
Opaque white	61-010217-0	7	5	5	5	Yes	200

(1) Light fastness, sterilization and heat resistance values refer to a solid printing without overprint varnish. These values may decrease when colour strength is reduced, when colours are intermixed, when printing by screen (half-tone) and/or when an overprint varnish is applied.

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. These products are only suitable for use on the non-food contact side of food packaging, provided they are applied under the relevant Good Manufacturing Practices (GMP) and according to the information in this Technical Data Sheet. The printer, converter and packer/filler have the legal responsibility to ensure that the finished article is fit for the intended purpose and that the ink and coating components do not migrate into the food at levels that exceed legal and industry requirements