

TOYO LIFE PREMIUM FOOD LO/LM**LP-9000**

TOYO LIFE PREMIUM FOOD LO/LM is a low migration – low odour series designed for the printing of primary packaging materials for foodstuffs on their exterior (for indirect contact only) surfaces.

TOYO LIFE PREMIUM FOOD LO/LM series are formulated with vegetable based raw materials. It does not include any mineral oil and drier. This series dry only by penetration, accordingly they donot produce any hexanal products while they dry on print and have very low odour and taint. Since it is dried by penetration, water based overprint varnish is required. WP-04000 WB PROTECTOR OPV_FOOD GLOSS and WP-0600 WB PROTECTOR OPV_MATT can be used together with LP-90000 series.

This series can be used with excellent results on high-speed presses and have high press stability. TOYO LIFE PREMIUM FOOD LO/LM is also very high pigmentation level providing good coverage.

PF-35000 PRESS FOUNT ALCOFREE FOOD SF fountain solution, used as alcohol reduced or respectively alcohol free systems, is recommended.

As stated in CEPE/ "Exclusion Policy for Printing Inks and Related Products" pigment colorants based on, and compounds of, the elements antimony, arsenic, cadmium, chromium (VI), lead, mercury and selenium, cobalt driers, fanal based driers, fanal based pigments and other hazardous chemicals are not used in the manufacture of TOYO LIFE PREMIUM FOOD LO/LM ink series.

Inks can meet the demand of the Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food. All sensory analysis results can meet Commission Regulation (EU) No 10/2011 of January 2011 on plastic materials and articles intended to come into contact with food. Manufacturing of this series are complies with requirements of Good Manufacturing Practices of Eupia Guideline.

*Migration and Sensory Analysis results performed by recommended institute ISEGA are available by request. Please do not add any additive or drier into the inks. For further information please consult our technical team.

This information is based on our latest state of knowledge, experience and results obtained in laboratory conditions by using specific processes and application types. Variety of the printing and process conditions may affect the results. In this case please contact to our technical department. And please check product performance and properties in your own conditions before doing industrial production. Toyo Printing Ink disclaims any liability for applications for which this ink series is not foreseen.

Technical Properties

- Low migration – low odour
- Do not affect organoleptic properties of food stuff packages
- Thanks to very high pigmentation / colour strength, thin ink film thickness helps drying properties
- Cobalt and mineral oil free and contains vegetable-based bio renewable materials
- Process colours comply with ISO 2846:1 colour standard and allow presses to print accordingly with ISO 12647 print standard
- Very good press stability and performance at high speed presses

Specifications

Physical Properties

| | |
|------------------|--|
| Base | : Vegetable oils |
| Colour | : Process and spot colours |
| Tack | : 7,0 – 9,0 (400 rpm/32°C/Inkometer) |
| Density | : 1,0-.1,1 g/ml |
| Drying Mechanism | : Penetration |
| Viscosity | : 45 - 80 Pa.s. (23°C, CP50, 25s ⁻¹ , Anton Paar MCR51) |
| Flash Point | : >100 °C |

Application Properties

| | |
|--------------------|---------------------------|
| Application Method | : Litho offset |
| Dry Film | : 1 - 3 gr/m ² |

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Fastness Properties

Process Colours

LP-92000 TOYO LIFE PREMIUM FOOD LO/LM YELLOW
 LP-96000 TOYO LIFE PREMIUM FOOD LO/LM MAGENTA
 LP-91000 TOYO LIFE PREMIUM FOOD LO/LM CYAN
 LP-95000 TOYO LIFE PREMIUM FOOD LO/LM BLACK

Spot/ Base Colours

LP-92100 TOYO LIFE PREMIUM FOOD LO/LM YELLOW
 LP-92200 TOYO LIFE PREMIUM FOOD LO/LM YELLOW FAST
 LP-92210 TOYO LIFE PREMIUM FOOD LO/LM ORANGE
 LP-96660 TOYO LIFE PREMIUM FOOD LO/LM WARM RED FAST
 LP-96320 TOYO LIFE PREMIUM FOOD LO/LM RED 032
 LP-90250 TOYO LIFE PREMIUM FOOD LO/LM RUBINE RED
 LP-96250 TOYO LIFE PREMIUM FOOD LO/LM RUBINE RED FAST
 LP-96880 TOYO LIFE PREMIUM FOOD LO/LM PINK FAST
 LP-94500 TOYO LIFE PREMIUM FOOD LO/LM VIOLET FAST
 LP-91100 TOYO LIFE PREMIUM FOOD LO/LM PROCESS BLUE
 LP-99980 TOYO LIFE PREMIUM FOOD LO/LM GREEN
 LP-95100 TOYO LIFE PREMIUM FOOD LO/LM BLACK
 LP-94400 TOYO LIFE PREMIUM FOOD LO/LM TRANSPARENT WHITE
 LP-94560 TOYO LIFE PREMIUM FOOD LO/LM OPAQUE WHITE

Light
Fastness *Alcohol* *Alkali* *Nitro*

| | | | |
|-----|---|-----|---|
| 5 | + | + | + |
| 5 | + | (+) | + |
| 8 | + | + | + |
| 8 | + | + | + |
| 5 | + | + | + |
| 6-7 | + | + | + |
| 6 | + | + | + |
| 7 | + | + | + |
| 6 | + | + | + |
| 5 | + | (+) | + |
| 6 | + | + | + |
| 7-8 | + | + | + |
| 8 | + | + | + |
| 8 | + | + | + |
| 8 | + | + | + |
| 8 | + | + | + |

Storage and Shelf Life

Place away from sources of heat, ignition and direct sunlight. Could be stored in tightly closed pails/containers, indoors at normal room temperature (20 C) for 2 years.

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