



TOYO INK GROUP NETWORK

The Toyo Ink Group operates globally through approximately 70 companies and more than 8000 employees in about 24 countries and areas around the world. In each region, we engage in production development, production, sales, technical support and other operations to meet diverse market needs.

The Toyo Ink Group always seeks worldwide compatibility in the process of product development. To ensure the management of quality, costs, delivery times, and risks in different markets, we have constructed not only ISO-compliant management systems but also optimized production and supply systems and logistical networks centered on the Group's cross-organizational international procurement network and principal factories. These systems and networks extend across the world.



SHEET-FED OFFSET INK

TOYO Printing Inks Smarter Sheet-Fed Offset Printing Solutions

TOYO INK

TOYO INK GROUP

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TOYO INK
For a Vibrant World

SHEET-FED OFFSET INK SERIES PROCESS INK SERIES

Product Code	Product Name	Coated Paper	Mat Coated Paper	Uncoated Paper	Board	Metalised Paper	Gloss	Rub Resistance	Setting on Paper	Explanations
LF-1XXX LF-3XXX	TOYO LIFE	***	***	***	***		***	***	***	Vegetable/mineral oil based.ISO 2846:1 FODGRA certified, very high colour strength, excellent rub resistance, multi purpose process ink series. High gloss High colour strength (**Special Deep Black LF-1571 is available also) Duct fresh *For perfecter machines LF-3000 series are suitable with specially improved drying properties Complies with the RoHS Directive (Directive 2015/863)
TB-9XXX	TOYO LIFE BIO	***	***	***	***		***	***	***	Trichromic ink series, formulated with vegetable oil based varnishes derived from renewable resources. This series does not include cobalt based driers. Vegetable based and does not include cobalt based driers Very high gloss Very good rub and scratch resistance Very good ink/water balance Excellent dot sharpness Excellent dot sharpness Maximum colour strength and print density Fast setting and drying performance on paper Excellent ink transfer and very low misting even at very high speed Complies with the RoHS Directive (Directive 2015/863)
LP-9XXX	TOYO LIFE PREMIUM FOOD LO/LM	***	***	***	***		***	**	**	low migration – low odour series designed for the printing of primary packaging materials for foodstuffs on their exterior (for indirect contact only) surfaces. Low migration – low odour Do not affect organoleptic properties of food stuff packages Thanks to very high pigmentation / color strength, thin ink film thickness helps drying properties Drier and mineral oil free and contains vegetable based bio renewable materials ISEGA certified (please consult for certification and application details)
TU-1XXX	TOYO UNIVERSE	***	***	***	***		**	**	***	These series inks are universal and economical for printing on almost every kind of paper and board. Vegetable and mineral oil based. High gloss Good rub and scratch resistance Very good ink-water balance Excellent dot sharpness Good runnability and press performance Fast setting and drying Suitable for fast back-ups Optimum colour strenght and print density Good ink transfer even at high speed Inks can be left 48 hours in the duct Suitable for UV varnishing Complies with the RoHS Directive (Directive 2015/863)

Inks



COLOUR SERIES

Product Code	Product Name	Coated Paper	Mat Coated Paper	Uncoated Paper	Board	Metalised Paper	Gloss	Rub Resistance	Setting on Paper	Explanations
DB-5XXX	TOYO BOARD	***	***	**	***		**	***	***	Vegetable and mineral oil, high colour fast process ink series. Especially developed for printing which requires light, chemical and rub/scratch resistance. Because of high chemical resistance of inks, prints are not affected by billboard glues.
PO-DXXX	TOYO FOLYO					***	**	**	**	Designed especially for impervious materials such as plastic foil, hologram paper, aluminum-coated board or metalised paper, as well as non- absorbent papers (for beverage cups). For the best results, prints should be completed a one pass press. So depending on the print necessity multi-colour presses should be use. In order to get the best adhesion, substrates should be clean (without grease and dust) Printed sheets stacks should be kept small and spray powder should be used to promote oxidative drying. 8-12% FM-9929 offset alcohol should be used in the fountain solution that will improve water-ink balance as well as drying.
PB-3XXX	SMART BIO PANTONE	***	***	***	***	*	***	***	***	Very good rub and scratch resistance Excellent ink-water balance Excellent dot sharpness Excellent runnability and press performance Fast setting and drying Suitable for fast back-ups High colour strength and print density Excellent ink transfer even at high speed Many of pantone and spot colour shades can be obtained by using pantone basic shades. Vegetable based and co free PB serie is a sheetfed offset ink serie which is developed for this purpose.
AN-3BXXX	ANKUR FLOURESCENTS	***	**	**	**		**	**	**	Pantone 801-809 flourescent colours. Very good rub and scratch resistance Very good ink-water balance Very good dot sharpness Very good runnability and press performance
MB-3XXX	TOYO SMART BIO MIX	***	**	***	***		***	***	***	Flexible colour matching paste system allows to prepare all Pantone and spot colours, MB-3*** is vegetbale oil based. Flexible system allows to prepare all Pantone and spot colours (ink formulation database available) Contains high resistant versions Very high pigmentation /color strength Cobalt free and contains bio renewable materials High gloss Good scratch and rub resistance

Spot & Pantone



METALLIC INK SERIES

Pantone	Product Code	Shade	Gloss	Rub Resistance	Setting Speed	Duct Stability (hour)
Silver	AG-0500	Silver	**	**	**	10-15
Pan. 877	AG-0877	Silver	***	***	***	
Gold	AG-0600	Gold	**	**	**	
Pan. 871	AG-0871	Gold	***	***	***	
Pan. 872	AG-0672	Gold	**	**	**	
Pan. 873	AG-0673	Gold	***	***	***	
Pan. 874	AG-0674	Gold	**	**	**	
Pan. 875	AG-0675	Gold	**	**	**	
Pan. 876	AG-0676	Gold	**	**	**	

Metals

AG Series, one component metallic inks, are most comprehensive and versalite offset inks. These series of inks are suitable for every application. AG series metallic inks formulated with high cluster pigments and high performance varnish system provide very good brilliance, outstanding print and transfer properties. These inks can be used in conventional or alcohol dampening system presses. Metallic inks have good lithographic properties and are suitable for light or heavy coated and uncoated paper/board.

*appropriate **good ***very good

SHEET-FED OFFSET PRINTING RHEOLOGICAL ADDITIVES

Product Code	Product Name	Explanation	Used For	Dosage
FM-0001	INK THINNING OIL	Used for thinning the ink and reducing tack value	For picking and build up problem. Reduces tack and viscosity	1 - 4 % max
FM-0130 FM-0133	TACK REDUCER GELS	Used to adjust the tack value without affecting the rheology	For picking and build-up problem. Reduces tack value.	2 - 5 % max
FM-0188	ANSET PASTE	Used to adjust the tack value without affecting the rheology and to prevent set-off	For set-off problem reduces tack value Improves setting and stacking properties	2 - 5 % max

Additives

DRYERS

Product Code	Product Name	Explanation	Used For	Dosage
FM-0203	LIQUID DRYERS	Catalysts to increase drying properties of inks in offset printing. Excess usage may cause drying of ink on the cylinders of press.	For slow drying problem, improve oxidative dryign.	1 - 2 % max
FM-0206	LIQUID DRIER	FM-0203 Surface to inside drying FM-0206 Inside to surface drying		
FM-0207	SAHARA SICCATIVE PASTE	FM-0207 Surface and inside drying *Activated on offset presses only		
FM-0017	OTHER EXCIPIENTS	Effectively, prevents ink drying on the rollers and also inhibits skin formation in duct when the press is left for a long period.	For skinning on rollers, in duct or can. Keeps ink fresh in duct.	

SHEET-FED OFFSET FOUNTAIN SOLUTION CONCENTRATES

Product Code	Product Name	IPA free	IPA Reduced	IPA	UV	ISEGA	Dosage
FM-9008	AQUA SHEET			✓			if water hardness >18dH° %3, < 12 dH° %2
PF-3300	PRESS FOUNT ALCOFREE SF	✓	✓				3- 4 % max
PF-3500	PRESS FOUNT ALCOFREE FOOD SF	✓	✓			✓	2 - 4 % max

Fountain Solutions

DAMPENING SYSTEM AUXILIARIES

FM-9929	OFFSET ALCOHOL	Alcohol additive, which is used at alcohol dampening systems of sheet-fed presses.	%8-12
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OVERPRINT VARNISHES WATER BASED OVERPRINT VARNISHES

Product Code	Product Name	Economic	Gloss	Matt	Indirect Food Contact	ISEGA	Viscosity (@23C DIN4)	Explanation
WP-0900	TOYO WATER BASED OPV	✓	✓				40-45	<ul style="list-style-type: none"> Fast curing Excellent rub and scratch resistance Low odour (low odour after drying) High resistance to UV light (non yellowing) Very good blocking resistance (spray powder not required) Suitable for conventional 2-roller system and anilox
WP-0100	WB PROTECTOR OPV ECO GLOSS	✓	✓				50-60'	
WP-1100	WATER BASED OFFSET VARNISH	✓	✓		✓	✓		
WP-0400	WB PROTECTOR OPV FOOD GLOSS		✓		✓	✓		
WP-0600	WB PROTECTOR OPV MATT			✓	✓	✓		
WP-0650	WB PROTECTOR OPV EKSTRA MATT			✓				

Varnishes

OIL BASED OVERPRINT VARNISHES

Product Code	Product Name	Explanation
VP-3100	PRINT VARNISH MATT	High gloss and matt protective overprint varnishes have been developed for offset printings both for wet-on-wet and wet-on-dry applications.
VP-4100	PRINT VARNISH GLOSS	
VP-5000	PRINT VARNISH SEALER	



PRESS CLEANING AUXILIARIES

Product Code	Product Name	Explanation
FM-0914	BLANPAK ROLLER CLEANING PASTE	Roller cleaning paste for offset printing machines. It is used to clean ink, paper dust and dirt from the rollers. It is especially useful for fast colour changes.
FM-9911 FM-9910	ECO-WASH WASHING SOLVENT	Cleaning solvents, developed to meet the demands of modern printing industry machines having automatic cleaning functions.
FM-9904	CELTAR ROLLER & BLANKET CLEANING LIQUID	Very fast drying special solvent mixture to use for cleaning of blanket and rubber rollers of letterset and offset printing machines. FM-9904 forms a protective film over blanket surface after drying by means of special additives included in it.
FM-9908	BLANKET WASHING SOLVENT	

Auxiliaries

