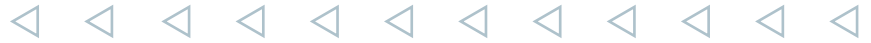


Technical Data Sheet

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INKMASTER LAMIPET Series



Description

INKMASTER LAMIPET inks are optimally pigmented vinyl based Gravure Inks, specially formulated for quality routine lamination jobs using various grades of Polyester films. These inks have excellent printability on Gravure Printing Machines running up to speeds of 300 M/M; maintain stable adhesion, and minimum solvent retention levels.

End Use

Very low odor and low solvent retention characteristics make these inks highly suitable for the packaging of food products such as coffee, biscuits, snack foods, cooked foods, confectionery etc. These inks also could be employed for reverse printing of the BOPP film, with addition of our InkMaster BOPP additives in appropriate proportion.

Printing Machines & Press Speed

INKMASTER LAMIPET Series is tailored to run effortlessly on Gravure printing machines. It may be printed at speeds from 100 to 300 m/min, depending upon press drying capabilities and the solvent used for reduction. End of the press Chilled Roller arrangement to cool down the printed web before it enters the "Rewind Web" is recommended, when the printing speed is above 200 M/Min. Additionally, one needs to ensure that the re-wind reel pressure in kgs is within the limit to avoid any blocking or clinging of the film within the rewind role. InkMaster Lamipet inks are suitable for all types of engraved cylinders (chemical, mechanical and laser engraving).

Surface Printing Substrates:

INKMASTER Rev PET inks are suitable for reverse printing a number of films:

- PET (Normal) , CT-PET, CC-PET.
- BOPP (>38 Dyne/Cm) – after addition of BOPP additive.
- Paper – Non HR and non – Gloss applications.
- Other films after verification.
- PET to Poly / Met film lamination jobs.

Benefits

- High color strength.
- Good bond strengths.
- Almost instant adhesion.
- Low solvent retention.
- Free from migrating plasticizer resins.
- Use of solvent based and solvent less laminating adhesives possible.
- Does not contain pigments based on heavy metals.
- Does not contain plasticizers banned in certain countries.

Precautions

- Ink in the heat-sealing areas of a pouch could be problematic for large pouches with heavy material packed inside.

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Color Range



Full range of colors is available, which may only occasionally be restricted by specific end use related resistance properties.

Process Colour Range:

Product Description	Ink Solid %	Viscosity (Sec)Ford Cup /30°C	L.F.(1-8 Scale)
LAMIPET PRO. BLACK SUPER ARSR	22 ± 2	22 ± 5	7
LAMIPET PRO. BLACK SUPER ARSR	20 ± 2	22 ± 5	7
LAMIPET PRO. YELLOW - ARSR	20 ± 2	30 ± 5	4
LAMIPET PRO. YELLOW OPQ ARSR	20 ± 2	25 ± 5	4
LAMIPET PRO. CYAN - ARSR	20 ± 2	25 ± 5	7
LAMIPET PRO. MAGENTA	20 ± 2	25 ± 5	4-5
LAMIPET PRO. MAGENTA D	20 ± 2	25 ± 5	4-5

Standard Colour Range:

Product Description	Ink Solid %	Viscosity (Sec)Ford Cup /30°C	L.F.(1-8 Scale)
LAMIPET BLUE ROYAL	20 ± 2	25 ± 5	3
LAMIPET BLUE ROYAL ARSR	20 ± 2	25 ± 5	6-7
LAMIPET SP. MAGENTA- ARSR	20 ± 2	25 ± 5	5-6
LAMIPET RED TR	20 ± 2	25 ± 5	3-4
LAMIPET RED ARSR	20 ± 2	30 ± 5	5-6
LAMIPET POPULAR RED	20 ± 2	25 ± 5	3-4
LAMIPET TR ORANGE ARSR	20 ± 2	22 ± 5	5
LAMIPET TR GREEN	20 ± 2	25 ± 5	7
LAMIPET POTATO GREEN	20 ± 2	25 ± 5	7
LAMIPET REV PINK	20 ± 2	30 ± 5	3-4
LAMIPET VIOLET - Non ARSR	20 ± 2	25 ± 5	3
LAMIPET RED WARM	20 ± 2	30 ± 5	3
LAMIPET TRANS YELLOW ARSR	18 ± 2	40 ± 5	4-5
LAMIPET BLUE REFLEX	20 ± 2	25 ± 5	3
LAMIPET GREEN DARK	20 ± 2	25 ± 5	5
LAMIPET VIOLET ARSR	20 ± 2	25 ± 5	7
LAMIPET GOLD INK	20 ± 2	30 ± 5	NA
LAMIPET SILVER INK	20 ± 2	30 ± 5	NA

** A full range of colours is available specific shades are matched on demand.

** Several special shades, Dye Based Lacquers and Imitation Gold shades also are available on request

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White and Extender Medium:

Product Description	Ink Solid %	Viscosity (Sec)Ford Cup /30°C	L.F.(1-8 Scale)
InkMaster LAMIPET REV MEDIUM	14 ± 1	25 ± 5	N. A
InkMaster LAMIPET WHITE ARSR	38 ± 2	25 ± 5	7
InkMaster LAMIPET WHITE (HV) ARSR	39 ± 2	25 ± 5	7
InkMaster BOPP ADDITIVES	20 ± 1	60 ± 10	N. A

Printing and Processing:

Cup Used:	DIN Cup 4	AFNOR Cup 4	Ford 4 Cup	Zahn 2 cup
Viscosity :	15-19 sec	16-21sec	14-18 sec	20-23 sec

*The above figures are given for guidance only.

Printing and Processing:

	DIN Cup 4	AFNOR Cup 4	Ford 4 Cup	Zahn 2 cup
Gravure printing	15-19 sec	16-21sec	14-18 sec	20-23 sec

Dilution

Solvent and solvent blends used for dilution may need to be adjusted in accordance to printing conditions: Namely, printing process, printing speed, oven capability, and graphics such as solids, lines, half tone, vignette and process printing.

To achieve good DOT REPRODUCIBILITY @ 8% level, Use of Extra Retarder, such as MIBK is recommended

Depending on printing conditions, the following solvents may be used as retarder or accelerator.

- **Accelerator:** Ethyl Acetate, MEK (generally for white and other solid colours)
- **Standard:** Toluene / Ethyl acetate blend 50:50
- **Retarder:** MIBK (up to 20 % for fine half tones)

It is essential to ensure solvent removal, especially while employing excessive slow drying solvents, to avoid blocking and to maintain the low odor properties of these inks.

Reducing System

MIBK : TOLUENE: ETHYL ACETATE	10 : 45 : 45
TOLUENE : ETHYL ACETATE	50 : 50

*It is always better to mix the solvents before adding to the ink.

*Always shake the container vigorously before emptying the inks

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Shelf Life:



The inks and varnishes of this series have under normal conditions a shelf life of at least **6 months** (White) and **12 months** (all colors).

- Normal conditions mean:
- Storage in tightly closed containers.
- Temperature not exceeding 25°C for weeks or 30°C for days.

Short time excess-temperatures e.g. at transport is not harmful. The products are sensitive to frost and or below Zero Degree Temperatures and shall require few hours' stabilization before using them on the printing machine, if exposed to such extreme conditions.

"Over-stored" inks (typical symptoms: fall in gloss, shift in shade, formation of odor and / or viscosity increase) may normally-off color being exceptions - be used the same way as residual (press returns) inks by controlled admixture to fresh inks.

Please take notice of the following:

The performance results indicated in this literature are only indicative under controlled conditions of laboratory with virgin & standard packaging grade films. Please do not use lower grades or substandard films. **Berger Paints Bangladesh Ltd.** will not take any responsibility for abnormal results on those cases.

Berger Paints Bangladesh Ltd. is responsible only to the tune of replacing the ink consumed in case of any printing related problems clearly assigned to incompatibility with the ink system recommended by **Berger Paints Bangladesh Ltd** for the print job under consideration. If you require any further information please do not hesitate to contact us or visit our website.