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Technical Data Sheet:

Product Identification:

Tru Ultralam Series

Decription: Tru Ultralam Inks are highly pigmented and low viscosity Flexo as well as Gravure (Common) Inks for both reverse and surface Printing applications (the later after adding TIL Slip & Scuff Additive, Code No. CSA-1610-04) with solvent Balance optimized to give best results at high press speeds due to its excellent chemistry management.

Due to its excellent technical properties, Tru Ultralam inks are suitable for all kind of packing structures (e.g. all kind of sealing as horizontal, vertical, Lap)

Tru Ultralam Inks are free from banned solvents (like Toluene and MEK) and are exclusively formulated with high Molecular weight, non-migrating plasticizing resins.

End Use: Very low odour and solvent retention characteristics make this ink system eminently suitable for to the packaging of food products such as coffee, biscuits, snack foods, confectionery carry bags, bread bags, shopping bags, snack food and frozen food packaging etc.

Printing Machines: Tru Ultralam Series is tailored to run effortlessly on High Speed CI Flexo Presses as well as on Flexo Stack Presses. These inks perform equally well when employed on Gravure printing machines also. These inks are originally designed as very highly pigmented – suitable for fast running CI Flexo presses with very fine anilox rollers. These inks could be easily converted to Gravure Printing application by appropriately diluting with solvents and extender medium – this in-house dilution for Gravure printing not only provides common ink advantage, but also saves a chunk of cost in terms of transport / logistics and preliminary margins of supplier. The advantages mentioned here are in addition to the flexibility in terms of ink pink strength adjustments as per the printing job requirements.

Printing Substrates:

- ✓ BOPP(Corona treated 38-42 Dyne/cm)
- ✓ Polyethylene (Corona treated > 38 Dyne/cm)
- ✓ Pearlized BOPP

Special Features

- ✓ High strength inks and Good Printing Stability
- ✓ High Transparency and Gloss
- ✓ Good Blocking resistance
- ✓ Excellent adhesion
- ✓ Good scuff resistance & slip properties: Enhanced by employing TIL Slip & Scuff Additive (Code No. CSA-1610-04).
- ✓ Excellent solvent release, enabling high press speeds to be used
- ✓ Designed to exhibit a low coefficient of friction
- ✓ Excellent freeze thaw resistance: making the ink suitable for the extreme cold weather countries
- ✓ Good heat resistance (> 160⁰C, 3bar, 1-sec., Treated film, under standard laboratory conditions).

Colour Range:

A full range of colors is available, which may only occasionally be restricted by end user requirements. The pigments used have reasonable commercial fastness to light but they may not withstand prolonged exposure to direct sunlight. If this property is required, it should be requested while placing orders.

Process Range:

Product Codes	Product Description	L.F. (1-8 Scale)	% Solids(±2)
CSK-1602-00	TRU ULTRALAM BLACK SUPER	7	33
CSY-1603-00	TRU ULTRALAM YELLOW P	5-6	31
CSY-1603-03	TRU ULTRALAM YELLOW PC	5-6	34
CSY-1603-04	TRU ULTRALAM YELLOW SUPER	5-6	34
CSC-1604-00	TRU ULTRALAM BLUE	7	34
CSM-1605-00	TRU ULTRALAM MAGENTA P	3-4	33
CSM-1605-01	TRU ULTRALAM MAGENTA PC	3-4	35
CSM-1605-02	TRU ULTRALAM MAGENTA SUPER	3-4	35

White and Extender Medium:

Product Codes	Product Description	L.F. (1-8 Scale)	% Solids(±2)
CSE-1600-00	TRU ULTRALAM MEDIUM EXTENDER	N.A.	20
CSW-1601-00	TRU ULTRALAM WHITE OPAQUE	7	48
CSW-1601-01	TRU ULTRALAM WHITE EURO	7	48

Standard Range:

Product Codes	Product Description	L.F. (1-8 Scale)	% Solids(±2)
CSY-1603-01	TRU ULTRALAM YELLOW OPAQUE	4	34
CSY-1603-02	TRU ULTRALAM YELLOW WARM	6	34
CSC-1604-01	TRU ULTRALAM BLUE REFLEX	3 to 4	35
CSC-1604-02	TRU ULTRALAM BLUE ROYAL	3 to 4	35
CSR-1606-00	TRU ULTRALAM RED WARM	3	35
CSR-1606-01	TRU ULTRALAM DEEP RED	5-6	35
CSR-1606-02	TRU ULTRALAM AR/SR RED (Geranium)	6	35
CSO-1607-00	TRU ULTRALAM ORANGE	5	35
CSG-1608-00	TRU ULTRALAM GREEN	7	35
CSV-1609-00	TRU ULTRALAM NON AR/SR VIOLET	5,D	34
CSV-1609-01	TRU ULTRALAM AR/SR VIOLET	7	34

Support Additives:

Product Codes	Product Description	Active % Content
CSA-1610-00	TRU ULTRALAM ADHESION PROMOTER	50 %
CSA-1610-04	TRU ULTRALAM SLIP & SURFACE SCUFF ADDITIVE	40 %

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
Flexo printing	19-22 sec	21-25 sec	20-24 sec	22-26 sec

****The above figures are given for guidance only.***

Viscosity adjustment should be undertaken only after the ink is well mixed and the ink is at room temperature. Viscosity is adjusted by adding solvents slowly in small quantities. See under “Dilution”.

The Actual viscosity used will depend on a number of factors, including print design, press conditions, the machine running speed and the desired colour characteristics.

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 and process printing.

To achieve good Dot-Reproduction in below 7 % dot areas, Use Extra Retarder

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

Accelerator:- Ethyl Alcohol(For Flexo) ,Ethyl Acetate(For gravure)

Medium:- N-Propyl Acetate

Slow:- N-Propanol

Retarder:- Methoxy Propanol, Ethoxy Propanol, Dowanol PM

Reducing Systems

We recommend few basic ratios:

Reducers For Flexo:

N-Propyl Alcohol	70
N-Propyl Acetate	20
Dowanol-PM	10
Ethyl Alcohol-99% Pure	70
N-Propyl Acetate	20
Dowanol-PM	10
N-Propyl Alcohol	80
N-Propyl Acetate	20
Ethyl Alcohol-99% Pure	80
N-Propyl Acetate	20

Reducers For Garvure:

Ethyl Alcohol-99% Pure	50
Ethyl Acetate	50
Ethyl Acetate	70
Ethyl Alcohol-99% Pure	30
Ethyl Acetate	70
N-Propyl Alcohol	30
Ethyl Acetate	50
Iso-Propyl Alcohol	50

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

Shelf Life:

The inks and varnishes of this series have under normal conditions a shelf life of at least 6 months.

Normal conditions means:

- Storage in tightly closed containers
- No admixtures
- Temperature not exceeding 25°C for weeks or 30°C for days.

Short time excess-temperatures e.g. at transport are not harmful. The products are not sensitive to frost.

“Over-stored “inks (typical symptoms : fall in gloss, shift in shade, formation of odour and / or viscosity increase) may normally – *off colour being exceptions* - be used the same way as residual inks by controlled admixture to fresh inks

Increased viscosity due to long-time storage of inks may generally be adjusted by addition of a slightly higher amount of thinner than the usual.

Please take notice of the following:

1. *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. Tirupati Ink Ltd., will not take any responsibility for abnormal results*

2. *Liability: While the information outlined is given in good faith, it does not constitute a guarantee and neither is one implied as to the specific end use suitability of any product. The customers should always evaluate the suitability of products to their own satisfaction*

2.1. *Tirupati Inks is responsible only to the tune of replacing the ink consumed in case of any printing related problems clearly assigned to in-compatibility with the ink system recommended by Tirupati Inks for the print job under consideration.*

If you require any further information please do not hesitate to contact us or visit our website.



Tirupati Inks Limited

ISO 9001:2000 & ISO 14001:2004 Company

D-109-112, Industrial Area GNEPIP, Site-V,
Kasna, Greater Noida (U.P.)-INDIA

Telephone: 91-120-2341227 , Fax: 91-120-2341229

E-Mail: info@tirupatiinks.com

Website: www.tirupatiinks.com