

IPICURE MD 3000

Offset sheet-fed UV inks for Metal Packaging Decoration (3 Pieces)

IPICURE MD 3000 series is the new premium series formulated and developed for printing on metal sheets such as Tinplate, TFS and Aluminium (3 pcs.). All inks of this series are to be considered “BP-A Not Intentionally Added” products. Thanks to their high color intensity and concentration, available in both Process Set and Base Colors, they are recommended for sheet-fed offset presses equipped with mercury lamp curing unit.

Properties

We recommend the **IPICURE MD 3000** series for standard applications with the following properties:

- Good ink / water balance
- Fast curing
- High gloss
- Low dot gain
- Good transfer and printing consistency
- ITX free and formulated in accordance to CEPE /EUPIA Exclusion list.
- Bis-Phenol-A Not Intent (BPANI)
- High mechanical resistance.
- Wide latitude of fount solution tolerance

Substrates

The IPICURE MD 3000 UV ink series is mainly suitable once properly coated with specific suitable enamel and/or clear size for:

- Tinplate
- Steel
- TFS

In case peculiar substrates or specific adhesion performance are required, we recommend that proper and specific tests were carried out before printing run.

Applications

Considering the good mechanical resistance of the cured ink layers, in-line varnishing for protection is not required, even if possible, however we recommend to use suitable UV varnish or suitable specific coatings in order to provide effective protection for the printed substrates for these applications:

- Crimped and welded seam 3-piece bodies
- Round bodied cans
- Aerosols
- Shallow draw cans and lids
- Food can ends
- Caps and Closures (Crown Cork, Twist- Off closures, etc.)

Food packaging

The products listed are not suitable for printing internal side of the packaging (box or closures). More information concerning the subject of packaging (food, cosmetics, etc.) can be found on the webpage of the European Printing Ink Association: www.eupia.org.

Color Gamut and Fastness Properties

Light, Alcohol, Solvent and Alkali Fastness

IPICURE MD 3000 *		Light Fastness	Alcohol	Solvent	Alkali
MS Yellow 060 (4C set)	6GI-3000-0060	5	+	+	+
Magenta 010 (GL 4C set)	6RS-3000-0010	5	+	+	-
Magenta 020 (4C set)	6RS-3000-0020	6	+	+	+
Cyan 090 (4C set)	6BL-3000-0090	8	+	+	+
Black 190 (4C set)	6NE-3000-0000	8	+	+	+
RS Yellow 050	6GI-4300-0050	6	+	+	+
GS Yellow 070	6GI-4300-0070	5	+	+	+
MS Yellow 260	6GI-4300-0260	7	+	+	+
Orange 040	6AR-4300-0040	5	+	+	+
Orange 240	6AR-4300-0240	7-8	+	+	+
Warm Red 030	6RS-4300-0030	4	+	+	+
Warm Red 225	6RS-4300-0225	7	+	+	+
Rubine. Red 220	6RS-4300-0220	7	+	+	+
Rhodamine Red 120	6RS-4300-0120	7	+	+	+
Violet 110	6VI-4300-0110	8	+	+	+
Reflex Blue 100	6BL-4300-0100	8	+	+	+
Green 080	6VE-4300-0080	8	+	+	+
Mixing Black 130	6NE-4300-0130	8	+	+	+
Tint medium White 150	6TR-4300-0150	NA	NA	NA	NA
Mixing White 140	6BI-3000-0140	NA	NA	NA	NA
		Light fastness based on standard ISO 12040: 1 (low) 8 (high)	Defined on standard ISO 2836: +: Resistance granted -: Resistance not granted		

*The assessment of the color properties was made under standardized printing conditions. In individual cases, under special conditions, as in printing with very high ink densities, the classification of certain properties may be different

Heat Fastness

IPIPURE MD 3000 *		Heat Fastness (Highbake 3 x10 mins – 410°F 210°C)		Heat Fastness (600°F/ 315°C - 6 seconds)	
		Full Tone	20:1 REDN	Full Tone	20:1 REDN
MS Yellow 060 (4C set)	6GI-3000-0060	D	D	D	F
Magenta 010 (GL 4C set)	6RS-3000-0010	D	D	SD	D
Magenta 020 (4C set)	6RS-3000-0020	D	D	SD	D
Cyan 090 (4C set)	6BL-3000-0090	SD	D	SD	F
Black 190 (4C set)	6NE-3000-0000	SD	SD	SD	SD
RS Yellow 050	6GI-4300-0050	D	D	SD	F
GS Yellow 070	6GI-4300-0070	D	D	SF	F
MS Yellow 260	6GI-4300-0260	SD	SD	SD	SD
Orange 040	6AR-4300-0040	D	D	SF	F
Orange 240	6AR-4300-0240	SD	SD	SD	SD
Warm Red 030	6RS-4300-0030	SD	D	SD	D
Warm Red 225	6RS-4300-0225	SD	D	SD	D
Rubine. Red 220	6RS-4300-0220	SD	D	SD	SF
Rhodamine Red 120	6RS-4300-0120	SD	D	D	F
Violet 110	6VI-4300-0110	SD	D	SD	F
Reflex Blue 100	6BL-4300-0100	SD	D	D	F
Green 080	6VE-4300-0080	SD	D	D	D
Mixing Black 130	6NE-4300-0130	SD	SD	SD	SD
Tint medium White 150	6TR-4300-0150	NA	NA	NA	NA
Mixing White 140	6BI-3000-0140	NA	NA	NA	NA

SF = Slight Fade F= Fade
SD= Slight Darkening D= Darkening

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Process Resistance

IPIPURE MD 3000 *		Test conditions :20lbs/264°F/1hr ++ 9kg/130°C/1hr		
		Full Tone	20:1 REDN	50:1 REDN
MS Yellow 060 (4C set)	6GI-3000-0060	G	SF	F
Magenta 010 (GL 4C set)	6RS-3000-0010	SF	F	F
Magenta 020 (4C set)	6RS-3000-0020	SF	F	F
Cyan 090 (4C set)	6BL-3000-0090	G	G	G
Black 190 (4C set)	6NE-3000-0000	G	G	G
RS Yellow 050	6GI-4300-0050	G	G	G
GS Yellow 070	6GI-4300-0070	G	SF	F
MS Yellow 260	6GI-4300-0260	G	G	G
Orange 040	6AR-4300-0040	G	SF	F
Orange 240	6AR-4300-0240	G	G	G
Warm Red 030	6RS-4300-0030	G	G	SF
Warm Red 225	6RS-4300-0225	G	G	G
Rubine. Red 220	6RS-4300-0220	G	G	G
Rhodamine Red 120	6RS-4300-0120	G	G	G
Violet 110	6VI-4300-0110	G	G	G
Reflex Blue 100	6BL-4300-0100	G	G	G
Green 080	6VE-4300-0080	G	G	G
Mixing Black 130	6NE-4300-0130	G	G	G
Tint medium White 150	6TR-4300-0150	NA	NA	NA
Mixing White 140	6BI-3000-0140	NA	NA	NA
		SF = Slight Fade F = Fail	G = Good	

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Printing Auxiliaries

The IPICURE MD 3000 inks are ready to use products. In case small adjustments are needed for special requirements, please find the recommended additives and technical information on the table below:

IPICURE MD 3000 Press room Auxiliaries		Usage	Dosage
Thinner/Diluent	6AD-8000-0000	Suggested usage to reduce tack and viscosity of the inks during printing run	Up to 5 %
Anti-tack Paste	6AD-8000-0003	Suggested usage to reduce the tack of the inks on difficult stocks	Up to 5 %
Catalyst Past	6AD-8000-0002	Suggested usage to enhance curing speed	Up to 5%

Shelf life

12 months from the production date if the container is not opened. Store between 5 - 35°C. Higher storage temperature may reduce shelf life. Protect from frost and sunlight. The cans need to be closed back immediately after usage.

Packaging

2.5 kg metal cans