METAL RAPID 7080
Offset sheet-fed inks for Metal Packaging Decoration (3 Pieces)

METAL RAPID 7080 series is the new premium series formulated and developed for printing on metal sheets such as Tinplate, TFS and Aluminium (2 pcs and 3 pcs.). 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 thermal oven lines. Suitable both for in-line and off-line coatings.

Properties
We recommend the **METAL RAPID 7080** series for standard applications with the following properties:
- Good ink / water balance
- High gloss
- Low dot gain
- Good transfer and printing consistency
- High mechanical resistance.
- Wide latitude of fount solution tolerance

Substrates
The METAL RAPID 7080 ink series is suitable for both uncoated and 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 dried ink layers, in-line varnishing for protection is not required, even if possible, however we recommend to use suitable specific coatings in order to provide effective protection for the printed substrates for these applications:
- Crimped and welded seam 3-piece bodies
- DRD and DWI cans and lids (canned tuna, canned meat, etc.)
- Round bodied cans
- Aerosols
- Shallow draw cans and lids
- Food Can Ends
- Caps and Closures (Crown Cork, Twist- Off closures,Pilfer-proof, 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

METAL RAPID 7080 *					
		Light Fastness	Alcohol	Solvent	Alkali
MS Yellow 060 (4C set)	1GI-7080-0060	5	+	+	+
Magenta 010 (GL 4C set)	1RS-7080-0010	5	+	+	-
Magenta 020 (4C set)	1RS-7080-0001	6	+	+	+
Cyan 090 (4C set)	1BL-7080-0001	8	+	+	+
Black 190 (4C set)	1NE-7080-0001	8	+	+	+
RS Yellow 050	1GI-7080-0050	6	+	+	+
GS Yellow 070	1GI-7080-0070	5	+	+	+
MS Yellow 260	1GI-7080-0260	7	+	+	+
Orange 040	1AR-7080-0040	5	+	+	+
Orange 240	1AR-7080-0240	7-8	+	+	+
Warm Red 030	1RS-7080-0030	4	+	+	+
Warm Red 225	1RS-7080-0225	7	+	+	+
Rubine. Red 220	1RS-7080-0220	7	+	+	+
Rhodamine Red 120	1RS-7080-0120	7	+	+	+
Violet 110	1VI-7080-0110	8	+	+	+
Reflex Blue 100	1BL-7080-0100	8	+	+	+
Green 080	1VE-7080-0080	8	+	+	+
Mixing Black 130	1NE-7080-0130	8	+	+	+
Tint medium White 150	1TR-7080-0150	NA	NA	NA	NA
Mixing White 140	1BI-7080-0140	NA	NA	NA	NA
		Light fastness based on standard ISO 12040: 1 (low) 8 (high)	Defined on standard ISO 2836: +: Resistance granted -: Resistence 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

The statements listed on this technical information sheet are according to our best knowledge. The statements do not exonerate the user from their own responsibility to determine that our products are suitable for their processes. They are intended to inform and advise and are subject to influence from the technical process. This edition of January, 2020 replaces all previous editions. With the present edition all older editions are null and void.
Edition 00-2020-Rev.00

Heat Fastness

METAL RAPID 7080 *		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)	1GI-7080-0060	D	D	D	F
Magenta 010 (GL 4C set)	1RS-7080-0010	D	D	SD	D
Magenta 020 (4C set)	1RS-7080-0001	D	D	SD	D
Cyan 090 (4C set)	1BL-7080-0001	SD	D	SD	F
Black 190 (4C set)	1NE-7080-0001	SD	SD	SD	SD
RS Yellow 050	1GI-7080-0050	D	D	SD	F
GS Yellow 070	1GI-7080-0070	D	D	SF	F
MS Yellow 260	1GI-7080-0260	SD	SD	SD	SD
Orange 040	1AR-7080-0040	D	D	SF	F
Orange 240	1AR-7080-0240	SD	SD	SD	SD
Warm Red 030	1RS-7080-0030	SD	D	SD	D
Warm Red 225	1RS-7080-0225	SD	D	SD	D
Rubine. Red 220	1RS-7080-0220	SD	D	SD	SF
Rhodamine Red 120	1RS-7080-0120	SD	D	D	F
Violet 110	1VI-7080-0110	SD	D	SD	F
Reflex Blue 100	1BL-7080-0100	SD	D	D	F
Green 080	1VE-7080-0080	SD	D	D	D
Mixing Black 130	1NE-7080-0130	SD	SD	SD	SD
Tint medium White 150	1TR-7080-0150	NA	NA	NA	NA
Mixing White 140	1BI-7080-0140	NA	NA	NA	NA

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

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Process Resistance

METAL RAPID 7080 *				
		Test conditions :20lbs/264°F/1hr ++ 9kg/130°C/1hr		
		Full Tone	20:1 REDN	50:1 REDN
MS Yellow 060 (4C set)	1GI-7080-0060	G	SF	F
Magenta 010 (GL 4C set)	1RS-7080-0010	SF	F	F
Magenta 020 (4C set)	1RS-7080-0001	SF	F	F
Cyan 090 (4C set)	1BL-7080-0001	G	G	G
Black 190 (4C set)	1NE-7080-0001	G	G	G
RS Yellow 050	1GI-7080-0050	G	G	G
GS Yellow 070	1GI-7080-0070	G	SF	F
MS Yellow 260	1GI-7080-0260	G	G	G
Orange 040	1AR-7080-0040	G	SF	F
Orange 240	1AR-7080-0240	G	G	G
Warm Red 030	1RS-7080-0030	G	G	SF
Warm Red 225	1RS-7080-0225	G	G	G
Rubine. Red 220	1RS-7080-0220	G	G	G
Rhodamine Red 120	1RS-7080-0120	G	G	G
Violet 110	1VI-7080-0110	G	G	G
Reflex Blue 100	1BL-7080-0100	G	G	G
Green 080	1VE-7080-0080	G	G	G
Mixing Black 130	1NE-7080-0130	G	G	G
Tint medium White 150	1TR-7080-0150	NA	NA	NA
Mixing White 140	1BI-7080-0140	NA	NA	NA
		SF = Slight Fade G= Good F= Fail		

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Drying Conditions

The METAL RAPID 7080 inks are suitable for different drying conditions and thermal oven lines. Suggested standard conditions of drying, considering a normally applied layer of inks are:

Temperature: 160-180 °C   Time: 8-10 minutes

In case small adjustments are needed for special requirements, please find the recommended additives and technical information on the table below

Printing Auxiliaries

The METAL RAPID 7080 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:

METAL RAPID 7080 Press room Auxiliaries		Usage	Dosage
Thinner/Diluent	9AD-7080-0000	Suggested usage to reduce tack and viscosity of the inks during printing run	Up to 5 %
Anti-tack Paste	9AD-7080-0002	Suggested usage to reduce the ink's tack	Up to 5 %
Catalyst	9AD-7080-0003	Suggested usage to enhance drying speed	Up to 3%

Shelf life

24 months from the production date if the container is not opened. Store between 5 - 35°C. Higher storage temperature may reduce shelf life.

Packaging

2.5 kg metal cans