

Technical Information

15.S.006 | Metal Decoration Heat-Curing System | Spot Inks, Mixing Systems



TINKREDIBLE MGA CRS^{max}

TMA - Metal Decoration Ink Mixing System

TINKREDIBLE the latest generation of oven-curing metal decoration inks designed for printing of food packaging.

TINKREDIBLE CRS^{max} is a high intensive metal decoration ink mixing system of oven-curing metal decoration inks designed for a wide range of applications. Choosing a suitable base inks assortment is of paramount importance in order to set the foundation for a convenient mixing process.

TINKREDIBLE CRS^{max} comprises of print ready, mono-pigmented base colour inks with high pigment concentration and highest levels fastness.

Range of Applications

The inks have been designed for printing from plates onto pre-coated or bright (uncoated) sheet metal. They feature a high surface hardness following thermal curing (150 – 175°C with a 10 minute pass) and are perfectly suitable for the application of a final coating, which can be applied wet-on-dry.

The range of potential print products extends from technical packaging through aerosol cans to sterilisation-temperature-resistant, deep-drawn forms of metal packaging.

Properties

TINKREDIBLE MGA	Sales code	Fastness properties per ISO 12040 / ISO 2836					
		Light BWS	Heat resistance ^{*1}	Sterilisation ^{*2}	Alcohol	Solvent mixture	Alkali
CRS ^{max} Yellow greenish	41 TMA 7071	6	+	+	+	+	+
CRS ^{max} Yellow reddish	41 TMA 7072	8	+	+	+	+	+
CRS ^{max} Orange	41 TMA 7073	6	+	+	+	+	+
CRS ^{max} Red	42 TMA 7075	7	+	+	+	+	+
CRS ^{max} Red	42 TMA 7076	6	+	+	+	+	+
CRS ^{max} Red bluish	42 TMA 7077	7	+	+	+	+	+
CRS ^{max} Violet fast	43 TMA 7078	7	+	+	+	+	+
CRS ^{max} Blue	43 TMA 7079	8	+	+	+	+	+
CRS ^{max} Green	44 TMA 7078	7	+	+	+	+	+
CRS ^{max} Black	49 TMA 7081	8	+	+	+	+	+
CRS ^{max} Opaque White	47 TMA 7154	8	+	+	+	+	+
CRS ^{max} Transparent White	40 TMA 7083	8	+	+	+	+	+

Spot colours inks from the traditional communication systems can easily be matched and produced with the appropriate equipment and necessary know-how, using the mixing system CRS^{max}.

- Metal decoration inks for printing the non-food contact surface for food packaging
- TMA = The CRS^{max} inks already contain dryer and are ready to print
- Mineral oil free
- Maximum colour depth
- Good adhesion
- Very good printability in offset and letter press
- Coatable wet-on-dry
- Good scratch resistance
- Deep-drawable
- Short drying time at the usual drier temperatures (10 min. at 150 – 175°C)
- Very high level of heat resistance (max.10 min. at 210°C)
- Sterilisation-resistant (1 h at 130°C)
- Regarding all other properties, especially those for printing food packaging, please refer to our Technical Information 15P005 TINKREDIBLE MGA Process inks

Technical application

Fount solution delivery and composition

Delivery of the fount solution on the press must be kept to an absolute minimum – particularly when the level of ink application is low – in order to prevent excessive emulsification and poor coating quality associated with this.

The hubergroup has developed fount concentrates for use specifically with these products:

- **HYDROFIX-B 8013** (mit 8-10 vol% IPA)
- **MGA HYDROFIX 8014** (mit 8 – 10 vol% IPA)

Auxiliaries

Normally the inks can be processed as delivered. If an adaption of properties becomes necessary due to exceptional printing conditions, only approved additives must be used which are compatible with the specific TINKREDIBLE MGA binder system:

- **TINKREDIBLE MGA Print Oil 10TMA1405** (1-3% addition) to reduce the tack and consistency

Under no circumstances may conventional printing ink oils, paste reducers or the like be used. TINKREDIBLE MGA inks may only be mixed with other TINKREDIBLE MGA inks.

Classification

MSDS is available upon request.