

## *Diatone*<sup>®</sup> MS-4

### **PRODUCT DESCRIPTION**

The *Diatone*<sup>®</sup> MS-4 sheet-fed offset ink is an over-night type process ink, with a high pigment concentration enabling to get maximum color density with optimal contrast. Setting on glossy or mat coated paper is very fast, so is ideally suited for quick turnaround operations

This series has excellent gloss, and very good dot sharpness and with quick and stable ink-water balance.

*Diatone*<sup>®</sup> MS-4 is ideal for printing on glossy coated paper and mat coated paper.

This series dries faster and gives higher gloss when applying IR. The temperature inside the paper pile must not be higher than 32 ÷ 35° C.

Only four process colors are available.

### **MAIN CHARACTERISTICS**

Both, conventional or low-alcohol fountain solution, can be used enjoying consistent printing quality. Alcohol contents depends on press type, dampening system or additive. In general, we do not recommend alcohol concentrations lower than 4% or higher than 12%.

As general rule, water temperature in each dampening duct, should be:

- Room temperature lower than 25° C : between 10 ÷ 15°C
- Room temperature higher than 25° C: between 7 ÷ 10°C

The best results are for pH value between 4,8 and 5,5.

### **Over-night performance.-**

Not being skinless, *Diatone*<sup>®</sup> MS-4 can remain in fountain and rollers for 10 to 12 hours, naturally depending on press and room conditions. In any case, for long stops, we recommend using anti-drying spray.

## CONSISTENCY PROPERTIES

YELLOW		MAGENTA		CYAN		BLACK	
TACK	FLOW	TACK	FLOW	TACK	FLOW	TACK	FLOW
210	7.0	210	8.0	210	8.5	240	6.0

Tack: This is measured using Tack-o-scope at 100m/min

Flow: This is the slope measured using spread-o-meter.

(Note: The value mentioned in the above table could be modified, in which case they will be upgraded in the next revision of the page web).

## FASTNESS CHARACTERISTICS

	YELLOW	MAGENTA	CYAN	BLACK
LIGHT FASTNESS	2-3	5	8	8
ACIDS RESISTANCE	5	2	5	5
ALCALI RESISTANCE	5	3	5	5
WAX BLEEDING	3	4	5	5
VINYL COATING RESISTANCE	4	4	5	4

- Light fastness values follow the blue wool scale ( 1 ÷ 8 )
- Other values go from 1 ( poor ) to 5 ( excellent ).
- Fastness values are based on pigments fastness properties

## STORAGE CONDITIONS

- This product should be stored isolated from heat and electrical sources. If possible, avoid direct contact with sunlight. Avoid extreme humidity conditions.
- In general, we recommend to use this product, preferently before 12 months from the date of manufacture, particularly in the case of black inks. After this time, please contact with our Technical Department before using it

Through the batch number of the ink is possible to obtain the date of manufacture. The lot number consists of several digits: the first one indicates the year (0: 2010, 1: 2011, 2: 2012) and the next two digits the

- For the inks packaged in drums, and to prevent the formation of skins, expiration date is 2 months from the date of delivery note for Yellow, Magenta and Blue, and 1 month for Black ink.
- Once the ink can is opened, it is recommended to close properly and to use it as soon as possible to prevent skin formation on the surface.

**REMARKS:**

- Due to the several factors influencing the UV varnishing process (like varnish quality, waiting time after printing and so on), we recommend to carry out a previous test.
- Provided that the product performance and its suitability for the customer's requirements depend on the particular conditions and we could not exercise any control in the printing process and the supports used, we recommend a test before printing. Also we recommend to contact with our Technical Department for unusual printing works.
- *Diatone*<sup>®</sup> **MS-4** is a standard sheetfed offset ink and can be used for the manufacture of secondary food packaging, but is not suitable for primary food packaging. If you need more information, please contact with our Technical Department