

# Technical Data Sheet

## Paint Marker Ink – PM14 / FPM14



Our latest generation of paint marker inks has been specially developed to offer improved opacity on dark surfaces. **PM14 & FPM14** will mark virtually any substrate to leave a high-impact permanent mark that is water, fade and rub resistant. Available in 16 vibrant colours, **PM14 & FPM14** offer excellent adhesion, are quick drying and are suitable for use in a wide range of applications – including Arts and Crafts.

Ink	Pantone Reference <sup>§</sup>	Shade <sup>§</sup>	Viscosity* (mPa.s)	pH <sup>†</sup>
PM14 Black	N/A	●	35.0	6.2
PM14 White	N/A	○	10.5	6.5
PM14 Blue	3005C	●	14.7	5.8
PM14 Green	3278C	●	18.4	8.0
PM14 Yellow	101C	●	9.9	8.3
PM14 Red	1797C	●	10.1	8.5
PM14 Gold	871C	●	17.8	5.4
PM14 Silver	877C	●	19.3	8.6
PM14 Platinum	8003C	●	7.3	5.9
PM14 Copper	876C	●	19.7	5.3
PM14 Rose Gold	873C	●	10.2	7.7
FPM14 Pink	806C	●	14.0	7.0
FPM14 Orange	805C	●	13.8	7.2
FPM14 Yellow	803C	●	13.5	7.1
FPM14 Green	802C	●	14.6	7.1
FPM14 Blue	801C	●	14.2	7.0

\*Viscosity is measured at 20°C, all viscosity values can vary  $\pm 5$  mPa.s. <sup>§</sup>Pantone references are approximate and vary depend on the ink lay down; <sup>†</sup> colours may not be accurately represented on some computer screens / from certain printers; <sup>‡</sup>pH variance is typically  $\pm 0.1$

Density = **1.01 g.cm<sup>-3</sup>**; Surface tension = **27 nNm.m<sup>-1</sup>**; Multichem inks have a  $\Delta E \leq 3$ , Approximate VOC content **610g/L**

### PM14/FPM14 in Your Pens

**PM14/FPM14** inks are designed for use with valve action markers. In order to avoid a pressure build up, the valve should be activated after assembly by depressing the nib.

Nibs: Polyester, high porosity; Multichem recommends a porosity of around 70% for optimum flow performance.

Barrels: PP, PE, aluminium

Caps: PP. Refer to BS 7272-1:2008 for more details

Once selected the components should be thoroughly tested.

For optimum performance markers should ideally be stored in a horizontal orientation and should be capped securely.

For further information about component selection, pen tests or pen storage please email [lab@multichem.net](mailto:lab@multichem.net)

### PM14/FPM14 in the Environment

Multichem strives to play its part in the responsible sourcing of raw materials and manufacturing of inks to help protect the environment.



### PM14/FPM14 in Your Factory

Multichem **PM14/FPM14** inks are guaranteed for 12 months from receipt when stored in the original sealed containers.

Store Multichem inks between 10°C < T < 30°C to avoid ink adverse performance features.

**PM14/FPM14** inks readily settle out during storage. This is completely normal. Prior to usage drums should be stored for at least 24 hours at room temperature (circa 20°C) and then thoroughly agitated until the ink is of a uniform consistency prior to use. Continuous stirring is recommended whilst filling the marker components.

Multichem inks which have passed their shelf life may still be fine to use. To find this out simply follow the guidelines above to obtain a uniform 100g sample of ink, label the ink with the product name and batch number and send it to Multichem for a quality check.

Please remember that **PM14/FPM14** inks are flammable liquids so please handle accordingly. For more information please refer to the CLP Material Safety Data Sheet for the **PM14/FPM14** range.

### PM14/FPM14 in the Market

Multichem has developed **PM14/FPM14** to comply with;

ASTM D-4236 TRA

Final markers may also require separate approval in order to meet some of the above regulations.

Our inks do not contain any Substances of Very High Concern (SVHC), Benzene, Toluene or Xylene. None of our inks require labelling under Proposition 65 (assuming a maximum reservoir capacity of 12ml).

All ingredients of **PM14/FPM 14** have been registered / pre-registered under REACH or are exempt from REACH registration