

Technical Data Sheet

Paint Marker Ink – PM5



PM5 paint marker inks can be used in a wide range of applications both indoors and outside. Perfect for arts and crafts applications such as posters, greeting cards and signs, they are also ideal for industrial environments. **PM5** will mark virtually any surface resulting in a high-impact, durable, rub-resistant permanent mark. The end result is similar in effect to using brush and paint but delivered in a convenient, easy-to-use marker system. **PM5** is alcohol-based, lightfast and water-resistant. No Xylene, Benzene or Toluene is used in our **PM5** range.

Ink	Pantone Reference [§]	Shade [§]	Viscosity* (mPa.s)	pH [†]
PM5 Black	N/A	●	15.3	6.7
PM5 White	N/A	○	19.5	7.4
PM5 Purple	2957C	●	9.8	7.0
PM5 Blue	292C	●	19.0	7.3
PM5 Blue	Process Blue C	●	11.7	6.7
PM5 Green	2240C	●	13.3	7.0
PM5 Yellow	3945C	●	12.9	7.0
PM5 Red	1787C	●	21.0	6.4
PM5 Pink	240C	●	16.7	6.4
PM5 Gold	871C	●	9.7	7.8
PM5 Silver	877C	●	21.0	7.4

*Viscosity is measured at 20°C, all viscosity values can vary ± 2.5 mPa.s. [§]Pantone references are approximate and vary depend on the ink lay down; [†] colours may not be accurately represented on some computer screens / from certain printers; [‡]pH variance is typically ± 0.25

Density = **1.01 g.cm⁻³**; Surface tension = **27 nNm.m⁻¹**; Multichem inks have a $\Delta E \leq 3$, Approximate VOC content **730g/L** (standard colours), **800g/L** (metallic)

PM5 in Your Pens

PM5 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

PM5 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.

PM5 has been developed to be as environmentally friendly as possible, as such over **49%** of the materials used are renewably sourced.

PM5 in Your Factory

Multichem **PM5** 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.

PM5 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 **PM5** inks are flammable liquids so please handle accordingly. For more information please refer to the CLP Material Safety Data Sheet for the **PM5** range.

PM5 in the Market

Multichem has developed **PM5** to comply with;

- EU / US / CA TRA 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 **PM5** have been registered / pre-registered under REACH or are exempt from REACH registration.

