

Technical Data Sheet

Permanent Ink – PP170



PP170 has very long cap-off lengths and is suitable for use on a range of substrates, including paper, card, OHP film, plastics, metals, glass, ceramics, wood and more. **PP170** was designed for use in both standard size and fine liner nibs. **PP170** can also be used to label CD's and DVD's and is ideal for professional display purposes and most art and craft applications.

Ink	Pantone Reference [§]	Shade [§]	Viscosity* (mPa.s)	pH [†]
PP170 Black	N/A	●	4.3	4.8
PP170 Dark Blue	2747C	●	3.2	5.3
PP170 Red	1935C	●	3.4	8.4
PP170 Green	347C	●	3.4	5.2
PP170 Violet	267C	●	3.0	6.4
PP170 Pink	233C	●	3.3	7.4
PP170 Cherry Red	186C	●	3.4	6.6
PP170 Scarlet	1795C	●	3.2	8.4
PP170 Orange	1665C	●	3.3	8.3
PP170 Golden Orange	144C	●	3.5	8.5
PP170 Yellow	129C	●	3.4	4.6
PP170 Lemon Grass	376C	●	3.4	5.8
PP170 Turquoise	327C	●	3.1	6.4
PP170 Sky Blue	2995C	●	3.8	6.3
PP170 Aqua Blue	639C	●	3.2	5.9
PP170 Brown	7517C	●	3.3	5.0
PP170 Light Brown	723C	●	3.4	5.7

*Viscosity is measured at 20°C, all viscosity values can vary ± 1 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 ± 1

Density = **0.96 g.cm⁻³**; Surface tension = **27 nNm.m⁻¹**; Multichem inks have a $\Delta E \geq 3$, Approximate VOC content **875g/L**

PP170 in Your Pens

The performance features of all permanent inks can vary depending on the components which the inks have been paired with.

Nibs: Polyester and acrylic; Multichem recommends a porosity of around 65% for optimum flow performance. Extruded POM.

Reservoirs: polyester; Multichem recommends a reservoir density of 0.185 g.cm⁻¹

Barrels: PP, PE

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

Once selected the component combination 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

PP170 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.



PP170 in Your Factory

Multichem **PP170** 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.

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 **PP170** inks are flammable liquids so please handle accordingly. For more information please refer to the CLP Material Safety Data Sheet for the **PP170** range.

PP170 in the Market

Multichem has developed **PP170** to comply with all relevant health & safety and regulatory demands which means that all end users of the inks are suitably protected.

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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 **PP170** have been registered / pre-registered under REACH or are exempt from REACH registration