

Technical Data Sheet

Highlighter Ink – HLD / HLP



Multichem has two different forms of highlighter (**HL**) ink: dye-based (**HLD**) and pigmented (**HLP**). All **HL** inks are available in a range of fluorescent colours and are compatible with standard paper as well as specialist papers such as copy-fax, printer paper, fax paper. Our HLP inks are also available as a concentrate and come with the option of additional cap-off protection. The **HLD** range now also includes 6 new pastel shades too.

Ink	Shade [§]	Typical Viscosity* (mPa.s)	pH [†]	Available with Cap-off	Available as a Concentrate
HLD Yellow		3.2	10.5	-	-
HLD Green		3.2	10.5	-	-
HLD Lavender		3.0	6.9	<input checked="" type="checkbox"/>	-
HLD Peppermint		3.0	6.9	<input checked="" type="checkbox"/>	-
HLD Mint		3.0	6.9	<input checked="" type="checkbox"/>	-
HLD Lemon		3.0	7.1	<input checked="" type="checkbox"/>	-
HLD Sherbet		3.0	6.8	<input checked="" type="checkbox"/>	-
HLD Rose Water		3.0	6.5	<input checked="" type="checkbox"/>	-
HLP Yellow		3.2	6.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HLP Green		3.2	6.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HLP Pink		3.2	6.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HLP Orange		3.2	6.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HLP Red		3.2	6.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HLP Lilac		3.2	6.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HLP Cyan		3.2	6.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

*Viscosity is measured at 20°C, all viscosity values can vary ± 1 mPa.s, [§]colour shades 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 ± 0.5

Density = **1.01 g.cm⁻³**; Surface tension = **38 nNm.m⁻¹**; Multichem inks have a $\Delta E \leq 3$, Approximate VOC content **0 g/L**

HL in Your Pens

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

Nibs: Polyester, high porosity; Multichem recommends a porosity of around 65% for optimum flow performance. HLD inks have been known to react adversely with some grades of nylon nib, intense storage tests should be undertaken and nib producers consulted with.

Barrels: PP, PE

Caps: PP and HDPE. 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.

HL 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.

HL inks have been developed to be as environmentally friendly as possible, as such all **HL** inks contain at least **90%** renewable materials.

Further **HLP** inks are available as a (1:1) concentrate reducing their carbon footprint upon transport from Multichem



HL in Your Factory

Multichem **HL** 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.

HL in the Market

HL inks have specifically been developed to comply with:

- EN 71-3:2013 + A1:2014
- ASTM D-4236 TRA
- EU BPR 528/2012
- USP 51 + 61

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