Inks with “heads-up” technology (H) are formulated to substantially reduce the amount of operator maintenance. Inks with heads-up technology don’t require caping or purging between print cycles or after extended periods of down-time.

CM557H
for coated stock, matte, glossy papers & chipboard style substrates
The best alternative for customers who need to print on coated paper. It gives an image that resists smudging on coated sheets. While there will be some smearing when the image is smeared with a wet finger, it will remain clearly legible. The image gets into the paper stock and therefore gives a more durable solution. Colorant type: Dye.

Complete
for coated or non-coated stock
The COMPLETE ink is formulated to print on both coated and non-coated substrates. This ink will dry quickly and give good permanence on coated stocks, while maintaining excellent print quality and a dark image on non-coated stocks. Colorant type: Dye/pigment hybrid.

TWK1818H Complete
for coated or non-coated stock
This ink has the same features as the COMPLETE ink described above, but with the heads-up technology, which allows the cartridge to start up after extended periods. It runs well in bulk supply stations. Colorant type: Dye/pigment hybrid.

TWK1915H CORE
for corrugated box & porous substrates
Offers exceptional darkness, water permanence and extended decap properties. This ink is for porous stock applications including corrugate board. The CORE ink is designed for use in cartridges that are printing sideways onto corrugate boxes. The testing for this ink has been done in a packaging type environment. This ink is designed as a low maintenance ink that provides good decap time and high ink through put volumes when running in bulk. Colorant type: Dye/pigment hybrid.

TWK1961H Super Fast Black
for matte, glossy papers & corrugated style substrates
The Super Fast Black is a dye-based ink that is designed to print on scratch-off lottery tickets. It produces a high quality, scanable image that dries well on regular and coated substrates. This ink provides adequate decap time and very little maintenance. Colorant type: Dye.

TWK2010H Endurance Black
The TWK2010H ink provides a dark image and high cartridge throughput which results in lower impression costs. It runs well in bulk supply stations. Colorant type: Dye.

TWK2080H Reliable H
for coated stock
Displays a darker image than the CM557H, and dries extremely quickly on coated stocks. This ink also requires very little printhead maintenance when compared to the other inks. Colorant type: Dye.

TWK1396 MAX3
for PVC, plastic cards & aqueous media
The MAX3 inks are water/solvent based inks that are specifically designed for PVC and plastic card printing. They will also print on aqueous coated paper, varnished media, Tyvek and polyvinyl. This fast drying ink produces a quality image that is smudge resistant on a variety of media. Colorant type: Pigment.

TWK1921 MAX PLUS
for PVC & plastic cards
The MAX PLUS provides a darker image than the MAX2 and -3 and dries quickly on some stocks. Like the other MAX products it prints on a variety of substrates. Provides better ink lay down on substrates that have lower dye readings. Colorant type: Pigment.

TSK2039 BEAR
for difficult non-porous substrates
The BEAR black ink is a hybrid based ink that prints on non-porous substrates, such as foils, varnishes, and UV coated materials where instant drying is needed. Colorant type: Dye.
Note: Flammable.

TSK24703si* Solv-Jet
fast drying ink for difficult non-porous substrates
The Solv-Jet black ink is a fast drying ink that prints a dark permanent image. It is a solvent-based ink that is formulated for difficult media such as plastic wrap, PVC, Tyvek, foils, UV coats, varnish and some metals where a fast drying time is needed. Colorant type: Dye.
Note: Flammable.

TSK250002si* Sirius Black
fast drying ink for difficult non-porous substrates
The Sirius black ink is a fast drying ink with enhanced adhesion that prints a dark permanent image. It is a solvent-based ink that is formulated for difficult media such as plastic wrap, PVC, Tyvek, foils, UV coats, varnish and some metals. Colorant type: Dye.
Note: Flammable.

*Delivered in the HP 45si cartridge which is designed for solvent-based inks for printing on non-porous substrates. It supports faster speeds and longer throw distances. HP45si cartridges include a programmable HP Smart Card, which offers built-in intelligence for improved uptime, predictability, and troubleshooting.
Kao Collins Inks
BLACK INKS FOR HP TIJ 2.5

Storage conditions
Less than 24 hours:
Leave cartridge in printer.
Wipe and purge before use.
More than 24 hours:
Remove cartridge from printer and place a cartridge clip over the head.
Wipe and purge before use.

Storage temperature
Aqueous and solvent inks: 10-30°C
Operating temperature
Aqueous and solvent inks: 10-40°C

Shipping info
Solvent based inks are flammable and must ship according to UN1210/3.

Cartridge maintenance and handling
Clean the cartridge with a lint free cloth and wipe slowly and lightly across the long edge with the printhead facing down.

Aqueous inks
Use a lint-free cloth moistened with deionised water to clean the printhead.

Solvent inks
Use a dry lint-free cloth to clean the printhead.

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<table>
<thead>
<tr>
<th>Ink name</th>
<th>Substrates</th>
<th>Ink type</th>
<th>Avg. delivered ink</th>
<th>Colorant type</th>
<th>Shelf life</th>
<th>Voltage</th>
<th>Pulse warming</th>
<th>Pulse width</th>
<th>Drying time</th>
<th>Decap time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM557H</td>
<td>Coated stock, matte, glossy, chipboard style</td>
<td>Aqueous</td>
<td>42 ml Dye</td>
<td>12 mths</td>
<td>10.2 V Off</td>
<td>2.2 μsec</td>
<td>1-5 sec &lt; 1 min</td>
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<td></td>
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<tr>
<td>Complete</td>
<td>Coated or non-coated stock</td>
<td>Aqueous</td>
<td>42 ml Dye/Pigment</td>
<td>12 mths</td>
<td>10.2 V Off</td>
<td>2.2 μsec</td>
<td>1-2 sec &gt; 1 hr</td>
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<td>TWK1818H Complete</td>
<td>Coated or non-coated stock</td>
<td>Aqueous</td>
<td>42 ml Dye/Pigment</td>
<td>12 mths</td>
<td>10.2 V Off</td>
<td>2.2 μsec</td>
<td>1 sec &lt; 5 min</td>
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<tr>
<td>TWK1915H Core</td>
<td>Corrugated box &amp; porous</td>
<td>Aqueous</td>
<td>42 ml Dye/Pigment</td>
<td>12 mths</td>
<td>10.2 V Off</td>
<td>2.2 μsec</td>
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<tr>
<td>TWK1961H Super Fast Black</td>
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<td>Aqueous</td>
<td>42 ml Dye</td>
<td>12 mths</td>
<td>10.2 V Off</td>
<td>2.2 μsec</td>
<td>1-3 sec &lt; 30 min</td>
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<td>Aqueous</td>
<td>42 ml Dye</td>
<td>12 mths</td>
<td>10.2 V Off</td>
<td>2.2 μsec</td>
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<tr>
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<td>42 ml Dye</td>
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<td>2.2 μsec</td>
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<td>Aqueous</td>
<td>42 ml Dye</td>
<td>12 mths</td>
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<td>2.2 μsec</td>
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<td>42 ml Pigment</td>
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<td>10.2 V Off</td>
<td>2.2 μsec</td>
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<td>PVC, plastic cards</td>
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<td>42 ml Pigment</td>
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<td>10.2 V Off</td>
<td>2.2 μsec</td>
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<td>Solvent</td>
<td>42 ml Dye</td>
<td>12 mths</td>
<td>7.6 V 40°C</td>
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<td>Solvent</td>
<td>42 ml Dye</td>
<td>12 mths</td>
<td>8.4 V 40°C</td>
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<td>Solvent</td>
<td>42 ml Dye</td>
<td>12 mths</td>
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<td>1.8 μsec</td>
<td>1-5 sec &lt; 5 min</td>
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</tr>
</tbody>
</table>

* Substrate dependent
** HSA Systems’ recommended Pulse Warming

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DISTRIBUTOR:

HSA Systems (head offices)
DENMARK | +45 4494 0222 | DENMARK | +45 6610 3401

HSA Systems (subsidiary offices)
FRANCE | +33 1 4815 5050 | GERMANY | +49 5257 938 6777

www.hsasystems.com | mail@hsasystems.com