

COLORWORKS™ C4000 GLOSS VS. MATTE INK DESCRIPTION

Gloss vs. Matte Comparison

Both the gloss black and matte black inks are highly durable pigment-based inks. Both have been BS5609 certified¹. The matte black ink offers a darker black on matte media and a richer image on plain media. The gloss black ink, similar to the C7500G inks, is able to print on a wider variety of substrates. The same cyan, magenta, and yellow inks are used with both blacks.

Product Application

The gloss black ink supports the widest range of media.

Media	Gloss black ink SJIC41P(BK) UltraChrome® DL	Matte black ink SJIC41P(MK) UltraChrome DL
Plain paper – uncoated	Good image	Richer image – darker black
Matte paper – coated	Good image	Richer image – darker black
Matte synthetic – coated	Good image, BS5609 certified ¹	Richer image – darker black, BS5609 certified ¹
Textured paper	Good image	Richer image – darker black
Wristband	Excellent image	Richer image – darker black
Low gloss paper – coated	Excellent image	Good image
Semi-gloss paper – coated	Excellent image	Not recommended
High gloss paper – coated	Excellent image	Not recommended
High gloss synthetic – coated	Excellent image	Not recommended

Technical Details

The primary difference is the size of the pigment particles. Glossy media has a slick surface which has extra fine pores. For proper adhesion, the pigment particles must be especially small to penetrate the surface and achieve proper bonding. Unfortunately, this same characteristic results in the pigment settling extra deep into matte surfaces. This causes the image to appear slightly muted; especially for black. The matte black ink has larger pigment particles which remain closer to the surface yielding a more vibrant image on matte materials. Unfortunately, this larger particle struggles to bond to the fine pore glossy surface, resulting in insufficient drying and image durability. It is important to note that the gloss black ink on matte media creates a good image and is acceptable in most circumstances. Ink safety data sheets can be found on the [Epson.com](https://www.epson.com) support page for each printer.

Ordering Process

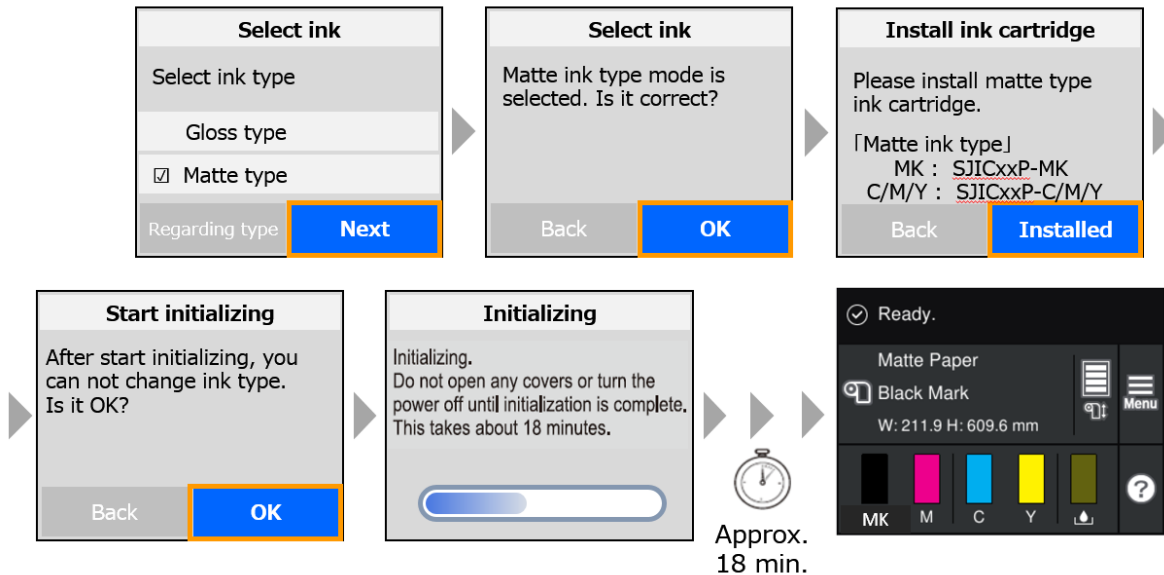
- 1) Order is placed for the desired printer model and specifying matte or gloss, e.g. **C4000 matte**.
 - *Side note: It is strongly recommended to order an extra set of ink and maintenance box with the printer, because a significant amount of ink is used during the one-time printer initialization process.*

MODEL	SKU (Gloss)	SKU (Matte)
CW-C4000 printer	C31CK03A9991	C31CK03A9981
SJIC41P C4000 black ink	C13T52L120	C13T52L520

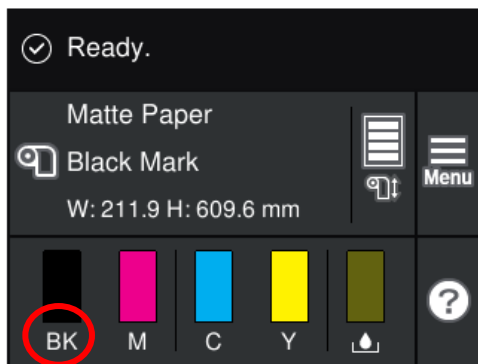
- 2) For ongoing ink replenishment, place orders for gloss black or matte black ink. CMY inks are the same for both versions.

Initialization Process

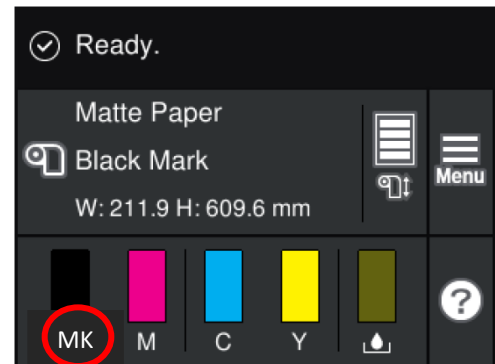
To set up a printer to use matte black ink, follow these steps when the printer is turned on for the first time:



Note that the front panel will show whether the printer is set up using gloss black ink or matte black ink:



Gloss black



Matte black

To help prevent user error, the gloss and matte black inks are keyed differently, so the printer will flag the user with an error message if the wrong cartridge is installed.

Conversion

Once gloss or matte black ink is selected during printer initialization, it cannot be changed. Therefore, it is very important that the end user decides upfront which printer model and ink is most suited for their application.

Recommended Printer

If it is known that ALL media to be printed on is matte, the matte printer & ink is the best choice.

If printing is required on glossy materials, even if only occasionally, the gloss printer & ink is recommended. If the range of applications is not certain, the gloss printer & ink is recommended. Both inks have BS5609 certification, so that is not a factor.

1 Requires BS5609-certified label material for use with printer and ink system.