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Maurice®
CE-SDS PLUS Cartridge

Part# PS-MC02-SP

Introduction

The Maurice CE-SDS PLUS cartridge is used for IgG purity and heterogeneity analysis on Maurice, Maurice S. or MauriceFlex systems.

Components

Includes	Qty/Kit
Maurice CE-SDS PLUS Cartridge	2

Storage Conditions

- Store cartridges at 18–28 °C room temperature

Other Things You'll Need

- Maurice CE-SDS Cartridge Cleaning Vials, PN 046-125
- Maurice clear screw caps for sample and reagent vials, PN 046-138
- Maurice glass reagent vials, 2 mL, PN 046-017
- Maurice CE-SDS orange pressure caps 12, PN 046-020
- Maurice 96-well plates, PN 046-021
- Maurice CE-SDS Separation Matrix, PN 046-386‡
- Maurice CE-SDS Running Buffer – Top, PN 046-384‡
- Maurice CE-SDS Running Buffer – Bottom, PN 046-385‡
- Maurice CE-SDS PLUS 1X Sample Buffer, PN 046-567‡
- Maurice CE-SDS 1X Sample Buffer, PN 046-012 (use as substitute for PN 046-567)‡
- Maurice CE-SDS Wash Solution, PN 046-569‡
- Maurice CE-SDS Conditioning Solution 1, PN 046-014‡
- Maurice CE-SDS Conditioning Solution 2, PN 046-015‡
- Maurice CE-SDS 25X Internal Standard, PN 046-144

Note: Items listed above are supplied in the Maurice CE-SDS PLUS Size Application Kit (PN PS-MAK03-S). Items marked with a ‡ are also supplied in the Maurice CE-SDS PLUS Reagent Kit, PN PS-MRK01-S.

- Maurice sample vials with integrated vial inserts, 0.2 mL, PN 046-083 (optional)
- Maurice CE-SDS Molecular Weight Markers, PN 046-432 (optional)
- Maurice CE-SDS IgG Standard, PN 046-039 (optional)
- β-mercaptoethanol (>98% = 14.2 M) for reducing conditions
- Iodoacetamide (250 mM) for alkylation at non-reducing conditions
- Deionized (DI) water
- Pipettes and tips

A Few Things You Should Know

- Whenever you handle the cartridge or remove it from its packaging, make sure the cartridge inlet doesn't come in contact with any surfaces.
- **Once you've inserted the Top Running Buffer vial, the cartridge insert and the cartridge must be kept in an upright position at all times.**
- Always perform the cartridge post-run cleanup before storing, and always store the cartridge in its original packaging at room temperature.
- If you see separation matrix sticking to the cartridge inlet, soak the inlet in DI water for five minutes. Then wipe it using a lint-free laboratory wipe that's been moistened with DI water.
- Performance for each cartridge is guaranteed for the first 100 injections and supports a maximum of 25 batches. The injection limit of the cartridge is 500. Its RFID will keep track of how many injections are left for you.

1 Let's Get Started!

A. Prepare Your Samples

Please see the instructions in the CE-SDS PLUS Size Application Kit product insert or CE-SDS Size Application Guide for sample prep details.

B. Prepare Your Cartridge

1. Take the cartridge out of its packaging. Save the packaging, you'll need it later.
2. Pull the cartridge insert out of the cartridge.
3. Fetch a fresh vial of Top Running Buffer from 2–8 °C and slide the Top Running Buffer vial into the cartridge insert so that the metal pin on the side of the vial is facing out. Press the vial up until it is completely inside the cartridge insert as shown in FIGURE 1.

   Notes: Once you've inserted the Top Running Buffer vial, the cartridge insert and the cartridge must be kept in an upright position at all times.

   The Top Running Buffer vial has metal pins on either side, so no specific orientation is necessary.

4. Slide the cartridge insert back into the cartridge.

C. Insert the Cartridge in Your Maurice System

1. Open Maurice's door by touching the metal plate on top of the door. The lights on either side of the cartridge slot will be **orange.**
2. Lift the cartridge and hold it vertically using the finger holds on either side, cartridge inlet down, with the CE-SDS PLUS label facing you.
3. Gently insert it into the slot.
4. Continue to slide the cartridge into the slot until the locking mechanism engages. The lights on either side of the slot will change to **blue** once the cartridge is installed correctly.

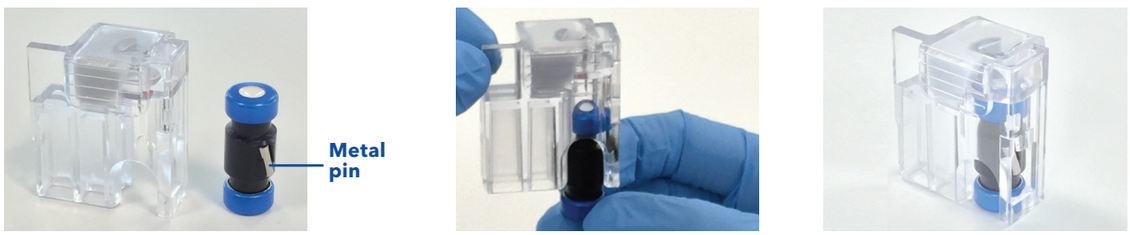


FIGURE 1. Assembling the Top Running Buffer vial in the cartridge insert. Keep the cartridge insert in an upright position after the vial is inside it.

1 Let's Get Started! *continued*

D. Place Your Samples and Reagents in Maurice

Prepare your batch reagents as shown in the table in FIGURE 2 and place the reagent vials in Maurice as shown in FIGURE 2. Depending on how you prepared your samples, place the sample vials insert or the 96-well plate insert into Maurice.

Note: If you're using a MauriceFlex system, lock your batch reagents in place by sliding the locking mechanism from the left to the right before starting the batch.

Reagent	Volume	Cap	Position
Conditioning Solution 1	1.5 mL	**Orange** pressure cap	P1
Conditioning Solution 2	1.5 mL	**Orange** pressure cap	P2
DI Water	1.5 mL	**Orange** pressure cap	P3
Separation Matrix	1.0 mL	**Orange** pressure cap	P4
Wash Solution	1.0 mL	**Orange** pressure cap	P5
Empty vial (air)	N/A	**Orange** pressure cap	P6
Wash Solution	1.5 mL	**Clear** screw cap	N1
Wash Solution	1.5 mL	**Clear** screw cap	N2
Running Buffer – Bottom	1.0 mL	**Clear** screw cap	N4

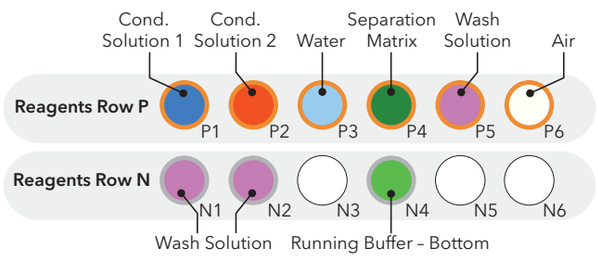
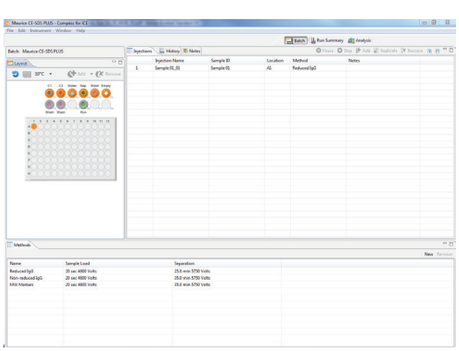


FIGURE 2. Reagent vial placement.

2 Start Maurice

1. Launch Compass for iCE.
2. Open a CE-SDS PLUS batch or create a new one and define your parameters. Only use the Maurice CE-SDS PLUS cartridge for a Maurice CE-SDS PLUS batch.
3. Click **Start**.



3 At the End of the Batch

1. Open Maurice's door.
2. Remove your samples. Leave the Water (P3), Wash Solution (P5) and Air (P6) in place if your cartridge still has injections left since they will be needed for the cleanup step. Discard the remaining reagent vials.
3. Remove the cartridge and pull the cartridge insert out.
4. Remove the Top Running Buffer vial and dispose of it according to your institution's safety and waste disposal guidelines.
5. Check the saturation sensor on the back of the cartridge insert (FIGURE 3). If it's red, you'll need to use a new cartridge insert for your next batch. If the saturation sensor isn't red, you can keep using the current cartridge insert with that cartridge.

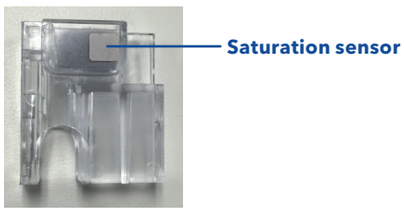


FIGURE 3. Cartridge insert.

Note: Don't dispose of the cartridge insert.

If you're at 100 injections, you've reached the limit of guaranteed performance for the cartridge. The cartridge will not be usable after 500 injections. To dispose of a finished cartridge put it back in its original packaging and discard it along with the cartridge insert and the Top Running Buffer vial per your institution's safety and waste disposal guidelines.

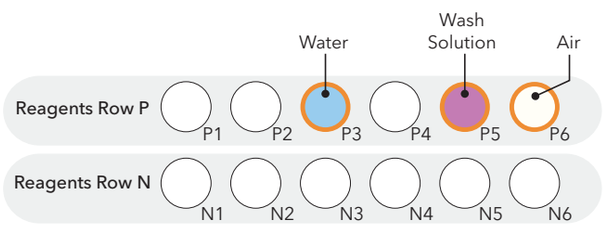


FIGURE 4. Post-Run Cleanup reagent vial placement.

If you've still got injections left and the cartridge will be used again. Clean up and store the cartridge.

1. Verify that the reagent vials are placed as shown in FIGURE 4. Check the volumes in each vial and fill according to the table in Step D, if necessary.
2. Insert a Cleaning Vial into the cartridge insert.

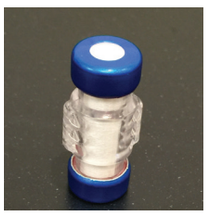


FIGURE 5. Cartridge vial.

3. Slide the cartridge insert back into the cartridge.
4. Insert the cartridge in Maurice.
5. In the Compass main menu, select Instrument and click **Cartridge Post-Run Cleanup**. It'll only take 6 minutes.
6. Once the cleanup procedure is done, remove the cartridge and pull the cartridge insert out.
7. Remove the Cleaning Vial and push the empty insert back into the cartridge.

   Note: The cleaning vial is paired with the cartridge and can be used for a maximum of five Cartridge Cleanup cycles of that cartridge. Dispose of the cleaning vial when you dispose of the cartridge, don't use it with other cartridges.

8. Put the cartridge in its protective packaging and store it at room temperature.

That's it, you're done!

PL3-0013, Rev D