

Vertu™ TOUCH Procedure for Cocoa Powder

- Warm up the strips to room temperature 20–25 °C (68–77 °F) for 20 minutes or longer before using.
- Do not open the strip pouch until ready to use the strip.
- Preset the incubator at 90 °C.

1. Setup and Sample Prep



- ▶ Scan the Ochra- V (D)* barcode for the lot of strips being used.

[Barcode remains stored in Vertu TOUCH reader for future use until expiry.]



- ▶ Attach an OchraTest 100 column to syringe barrel on pump stand with the union.**
- ▶ Put a filter funnel with folded microfiber filter on top of syringe barrel.



- ▶ Weigh 2.5 g ± 0.1 g finely ground sample into Vertu PREP tube.
- ▶ Add 25 mL MAX extraction solution,** close the lid, and briefly shake to suspend sample.
- ▶ Set Vertu PREP mixer to 120 seconds, push the tube down and twist to lock in place. The mixer will start and stop automatically.

2. Filter, Process Sample



- ▶ Pour extract into filter and collect **exactly** 3 mL of extract in syringe barrel.
- ▶ Remove the bottom cap of the column and let extract flow through by gravity or **slower than** 1 drop/2-3 seconds if using air pump until all the liquid has passed through the column.



- ▶ Add 2–4 mL of distilled water to syringe barrel.
- ▶ Turn the air pump to maximum speed and push water through the column until air comes out for 2–3 seconds.
- ▶ Remove excessive residual liquid from column barrel by forcefully tapping the bottom of the column a few times to a paper towel on the tabletop.
- ▶ Attach a 3 mL syringe with the union to the column and push residual liquid out of column completely.



- ▶ Insert the column into the 90° C incubator and let sit for **5 minutes**.
- ▶ After 5 minutes, remove the column and place into a plastic cuvette.
- ▶ Pipette 200 µL (or 2 x 100 µL) of MAX elution solution into the column headspace and let flow by gravity. If the flow does not start, use the 3 mL syringe to gently push solution into resin bed and then let flow by gravity. After all the elution solution has passed through the column, use the 3 mL syringe to push the last drop of liquid out of the column. No need to collect the foam.
- ▶ Gently swirl the cuvette to mix the eluted solution that was collected.

3. Strip Testing



- ▶ Pipette 100 µL of eluted solution (**Do NOT collect any foam in pipette tip**) to the Ochra-V strip by dropping (1 drop/second) vertically into sample well.
- ▶ Start the timer and allow the strip to develop for **exactly** 5 minutes on a flat surface.



While strip test develops, enter the sample ID into Vertu TOUCH reader.

- ▶ Fully insert the Ochra-V strip into the Vertu TOUCH (the round opening in first)
- ▶ Press [Start Measurement] key on touch screen after exactly 5 minutes incubation.



- ▶ Press [Print] to print the result.
- ▶ Press [Same Barcode] to run the next test using the same lot of strips.
- ▶ Press [Change Barcode] to change the method or lot of strips being used.

Strips should be stored at 2–8 °C (36–46 °F).

* Barcode D Range: 0–10 ppb (Limit of detection: 0.50 ppb)

** Union – Cut the tip of the OchraTest 100 column top cap to make a union.

*** MAX extraction solution is stable for 7 days at room temperature.



For additional information, please **scan the barcode**, or visit www.vicam.com/lp/ochra-v-max