Calculating Sweat Rate

1. Urinate and then record your body weight, ideally with no clothes on (A).

2. Perform your session and record exactly how much you drank. This is easy if you drink from a single bottle or two; simply weigh your filled bottles before you ride (X) and after (Y) and record the difference (Z). 1 gram = 1 milliliter. *
* Make sure all units are in kg or liters

3. After exercise, towel yourself dry and then record your weight (B). Again, it is best not to wear clothes, as they will hold some sweat. (same method of weighing as in step 1)

4. Now subtract your post-exercise weight (B) from your pre-exercise weight (A) to get the weight you lost during the session.
Weight lost (C) = A-B

5. Also subtract the weight of the bottle(s) before (X) and after (Y) to obtain the amount you consumed (Z).
Volume consumed (Z) = X-Y

6. You can now calculate your sweat rate in litres per hour:
(C + Z) / time in minutes × 60.

Note: It's best not to urinate during these sessions, as this can skew the results. However, if you do have to go, it's not a bad estimate to assume a fluid loss of about 0.3 L (300 mL) per bathroom stop. Subtract 0.3 kg for each stop from your weight lost (C) before you do the calculation in step 6.

A – B = C
X – Y = Z

(C + Z) / time in minutes × 60 = Sweat Rate (litres per hour)