

Prepping scintillation vials to run in an LSC

1. Place the wipe in a LSC vial.
2. Fill vial approximately $\frac{3}{4}$ full of scintillation fluid.



- For a 20 mL vial this would be approximately 15mL
- For a 7 mL vial this would be approximately 5 mL

NOTE:

- Ensure the scintillation fluid is not expired. The expiry date of a cocktail labeled on the container is usually one to three years later than the manufacture date.
 - Expired scintillation can discolor (often turning yellow) causing quenching which can lead to statistical fluctuations.
3. Cap each vial after adding the cocktail. Ensure that all vials are tightly capped to guard against leaking.

4. If a background reading is desired, you should prepare a background vial with new (clean) filter paper for each set of survey wipes.
5. Count in liquid scintillation counter (LSC) using the protocol set up by EHS for surveys.

Note:

- Organic molecules like the fluors used in the cocktail can be stimulated to excited states by many different forms of energy transfer. These can be heat, room light or sunlight, static charge and chemical reactions.
- Allowing the samples to dark adapt in the instrument is recommended in order to help control the excitation process light can cause. The dark adapt period will vary with instrument manufacturer and cocktail but generally is from 15 to 45 minutes.