

TESTING PRIOR KNOWLEDGE

Title of the activity: COSMETIC CREAMS: Identification and determination of parabens

(File name is: G_CREAM_Q_EN, which means that it is the English version of the test questions written for this Type "G" activity. The correct answers are shown in RED.)

1. What is the role of parabens in cosmetics?

Ans.: **preservatives, against micro-organism growth**

2. What is the fundamental concept of the separation method in liquid chromatography?

Ans.: **the interactions between the mobile phase, the stationary phase and the substances**

3. How can you increase the efficiency of a liquid-liquid extraction?

Ans.: **change the extracting solvent; increase the volume of the extracting phase; extract more times**

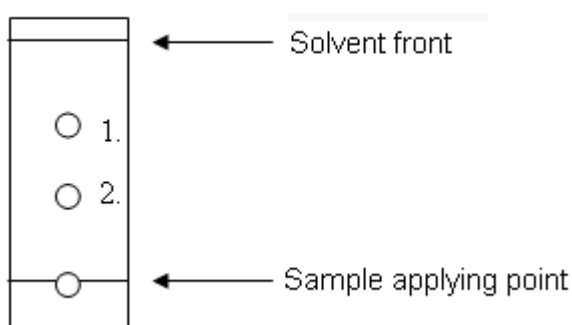
4. What is the driving force of the mobile phase in TLC?

Ans.: **capillary action**

5. What is the best deactivator of the silica gel layer? Think about why we heat it before use.

Ans.: **H₂O**

6. Determine the retention factors and the resolution on the developed silica gel TLC plate.



Ans.: **$R_{f1} \approx 0.65$; $R_{f2} \approx 0.35$; $R_s \approx 3,1$**

7. Sketch and label the main features of HPLC.

Ans.: **mobile phase, solvent delivery system (pump), sample injector, pre-column, column, detector, recorder, waste or collect fractions.**

Note: Correct answers are given in red. These need to be removed before the test is used.

This document was created with Win2PDF available at <http://www.daneprairie.com>.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.