

Exercise 1.79

The liquid substances mercury (density = 13.6 g/mL), water (1.00 g/mL), and cyclohexane (0.778 g/mL) do not form a solution when mixed but separate in distinct layers. Sketch how the liquids would position themselves in a test tube.

Solution

The lowest density liquid, cyclohexane, will position itself at the top of the test tube, whereas the highest density liquid, mercury, will position itself at the bottom of the test tube. The water will be between them.

