

Chemistry lab report conclusion flashcard



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Molar extinction coefficient - Absorbency (cavetti Absorbency = (Molar extinction coefficient)(cavetti length)(concentration) = 32303 For 3. No-mol/L Absorbency = (Molar extinction coefficient)(cavetti length)(concentration) = 3. Xx-4) = 10. 66 Conclusion The purpose of conducting this experiment is to accurately prepare a solution of potassium dichloride.

In this experiment, we aim to prepare lox and xx accurately diluted potassium dichloride solution. Initial hypothesis: A lox diluted potassium dichloride solution have an expected spectrophotometer reading of 1. 0 while a xx diluted potassium dichloride solution have an expected spectrophotometer reading of 0. 200. The result we obtained correlates strongly to the hypothesis, albeit with a spectrophotometer reading error reaching as high as +0. 07 which is still in the acceptable range.

We obtained 1. 066 spectrophotometer reading for our lox diluted potassium dichloride solution and 0. 224 spectrophotometer reading for our xx diluted potassium dichloride solution. Questions: 1 . What is the magnitude of parallax error indicated on each piece of volumetric lassoer?

If the mark on the volumetric is exceeded, is it considered parallax error?

The magnitude of parallax error indicated on each piece of volumetric glassware is low because volumetric glassware are made to measure volume of liquid very accurately with a given marker.

If the mark on the volumetric is exceeded, it is be considered parallax error due to the position of eyes and the angle towards the mark on the glassware of the users. Parallax error means using the instrument is incorrectly but still gets error which are not the true value. 5] 2. Calculate the percent error

when u fill the mall volumetric flask to the mark and add another 1 ml to cause the meniscus to exceed the mark.

Should you discard your solution if u accidental exceeded the mark by 0.

CM? Percentage error(%)= $\frac{\text{Expected value} - \text{observed}}{\text{Expectedness}}$

percentage Percentage error = 0. 2% No, we shouldn't, as referred to

reference 4, Volumetric glassware are only accurate when they are at their calibration temperature. Hence temperate affects the accuracy of the volumetric flask.

Based on the percentage error, Mil is not equal to LLC where t shows slightly inaccuracy of the volumetric flask. Volumetric flask normally works accurately under ICC. [4] 3. Are beakers, conical flask and laboratory bottles with volume markings considered volumetric glassware? W y? No, because volumetric glassware are specialized pieces of glassware which are used to measure volumes of liquids very precisely and accurately in laboratory works. Ordinary beakers and flasks are not used for accurate volume measurements; the markings on these pieces of glassware normally are only accurate to within 5%.

[4]