

ER	EXPERIMENT/SUBJECT	DATE	32
	LAB PARTNER	LOCKER/DESK NO.	COURSE & SECTION NO.

Observations

- Upon addition of 10 drops of 10% acetic acid, to the solution of 2.0g of ~~casein~~ ^{skim milk powder} in 20 mL of water, the casein precipitated and formed as a white, hard substance along the stirrer.
- After adding 2.0g of skim milk powder to 20 mL of warm water, the solution became an off-white colour and cloudy.
- The addition of 2 mL of ethanol, 1 mL of Hexane or 2 x 5 mL of distilled water did not have any visible effect on the precipitate.
- At first, the addition of 7.5 mL of NaOH (3M) did not have any effect on the precipitate. After stirring for a few minutes, the precipitate separated into a few smaller portions in solution.
- After the addition of 0.5 mL more of NaOH (3M), the precipitate almost completely dissolved or dissociated into solution with no colour change observed. *
- When ^{distilled} water was added to the solution to dilute it to a 30 mL, no apparent change was observed.
- After filtering the solution of any remaining precipitate, the solution appeared ~~off-white~~ and cloudy.

- Initial pH reading: 13.52 (no HCl added).
- After adding 10.5 mL of concentrated HCl, the solution's pH shot down to 4.11.
- After adding 0.4 mL of NaOH, the pH went up to 9.56.
- The addition of 7 mL of diluted HCl lowered the pH to 7.09.
- After adding 8.0 mL of diluted HCl to our solution, the precipitate formed at a pH of 4.44.
↳ isoelectric point.
- After the second casein solution was added to the buffer and 8 mL of HCl, the pH went up to ~~5.02~~ 5.20.
- The solution contained a tiny amount of a yellow, gelatin-like substance at the bottom of the beaker.

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