

15.11.3 Finding Vapor Pressure of a Solution (Nonionic-Volatile Solute) (Video)

This project was preformed to supply **Libretext Authors** with videos on General Chemistry topics which can be used to enhance their projects. Also, these videos are meant to act as a learning resource for **all General Chemistry students**.

Video Topics

A nonionic-volatile solute will also cause the vapor pressure of the solvent to decrease. However, because the solute is volatile it will also have a vapor pressure. To find the overall vapor pressure of the solution the vapor pressure of the solute and the solvent must be combined.

Raoult's Law $P_a = X_a P_{a0}$

P_a = Vapor pressure of a liquid in a solution

X_a = Mol fraction of the liquid in the solution

P_{a0} = Vapor pressure of the pure solvent

Because the solute is volatile we must consider the vapor pressure of both the solute and the solvent. $P_{\text{solution}} = P_{\text{solute}} + P_{\text{solvent}}$.

Link to Video

Finding Vapor Pressure of a Solution (Nonionic-Volatile Solute): <https://youtu.be/s06fzZZtLl0>



Attribution

- Prof. Steven Farmer (Sonoma State University)

15.11.3 Finding Vapor Pressure of a Solution (Nonionic-Volatile Solute) (Video) is shared under a [not declared](#) license and was authored, remixed, and/or curated by LibreTexts.