

## Solubility Product Virtual Laboratory Thermodynamic Calculations

This Lab can be accessed at following Link:

[https://chem.libretexts.org/LibreTexts/University\\_of\\_Arkansas\\_Little\\_Rock/Chem\\_1403%3A\\_General\\_Chemistry\\_2/LABS/Virtual\\_Laboratory/Virtual\\_Post\\_Lab\\_Exp\\_9%3A\\_Solubility\\_Product\\_and\\_Thermodynamics](https://chem.libretexts.org/LibreTexts/University_of_Arkansas_Little_Rock/Chem_1403%3A_General_Chemistry_2/LABS/Virtual_Laboratory/Virtual_Post_Lab_Exp_9%3A_Solubility_Product_and_Thermodynamics)

Your report needs to include:

1. This sheet of paper as cover page or an appropriate cover page
2. Unknown Number on cover sheet
3. Value of K at room temperature. Show math
4. Value of  $\Delta G^0$  at room temperature (show math)
5. Value of K and  $\Delta G^0$  at 95°C . You can change the temperature by right clicking on the flask and choosing the thermal properties setting. You must specify the temperature and show the math.
6. Value of  $\Delta S^0$  , show math.
7. Value of  $\Delta H^0$  , show math.

Note: You **do not use pH to calculate ion concentrations**. They are given by the virtual lab. Also, you can determine the formula of the salt from the charge of the ion. If the salt had a cation of +1 ( $C^+$ ) and an anion of -1 ( $A^-$ ), then the formula is  $CA_2$  and the anion concentration is twice that of the cation as

