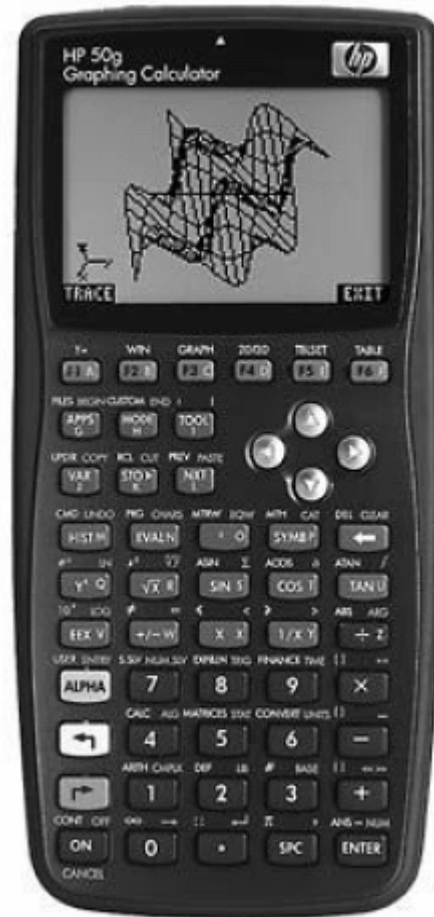


LABTOOLS V1.0 FOR HP CALCULATORS



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Requirements

49G, 49G+ or 50G HP calculator

[Informit](#) library

[HP periodic table](#)

Here is this library, excuse the lack of documentation but english is not my native language but i made the library in english because any one can use it in that language.

Here is the basics.

BFCLC: It has two programs: *Find buffer's pH* and *Buffer maker*



Find buffer's pH: It has four fields:

1. **AB?**: Choose the buffer type, acidic or basic.
2. **K**: Acidic or basic constant.
3. **[AB]**: Base or acid initial concentration.
4. **[C]**: The conjugate's initial concentration (SALT concentration).



Buffer maker: It has four fields

1. **AB?:** Choose the buffer type, acidic or basic.
2. **K:** Acidic or basic constant.
3. **pH:** Desired buffer pH.
4. **[C]:** Initial concentration of base or acid (usually 0.1_mol/L)



A screenshot of a software dialog box titled "BUFFER MAKER". It contains four input fields: "AB?" with the value "ACIDIC", "K:", "pH:", and "[C]:". At the bottom, there is a label "Choose a buffer type" and three buttons: "CHOOS", "CANCEL", and "OK".

The answer is the required concentration of salt to build the buffer. Note [C] is an arbitrary quantity, you have to prepare an acid or base with that arbitrary concentration or viceversa.

- **DSOLM:**



A screenshot of a software dialog box titled "DISOLUTION MAKER". It contains several input fields: "CS:" with the value "LIQUID", "C:", "d: 1_g/ml", "p:", "c: 1_mol/l", and "V1: 1_ml". At the bottom, there is a label "Source Compound" and three buttons: "CHOOS", "CANCEL", and "OK".

This program is used to calculate the amount necessary of reactive (from the supplier) to prepare a dissolution.

1. **CS:** Choose the physic state of the source compound.
2. **C:** Introduce the formula as a string "HCl"
3. **d:** Introduce labeled density (only for liquids reactives, with solids put any value or nothing)
4. **p:** Purity (labeled)
5. **c:** Desired dissolution concentration.
6. **V1:** Introduce desired volume.

MOLC

Convert mol to g. An g. To mol.

Put a value with a weight unit (any weight unit) in level 2, a string formula in level 1 and then MOLC, the result is the mol equivalent. Works in both directions.

You can use mol, lbmol, gmol or any weight unit. The results always shows g. or mol.

Well, excuse the lack of documentation again, if you can read spanish i strongly recomend the other manual (spanish manual).

Please if you have a suggestion or ideas mail me, i cannot speak a write english in a correct way but i can read and undertand it.

March 16th, 2007.