

Simple Solutions windows

The screenshot shows the ZOLUTO software window. The interface includes a menu bar (1) with File, Edit, See, Language, and Help. Below it is a toolbar (2) with icons for Open, Save, Print, Copy, Cut, Paste, and font settings. The main area has three tabs: Simple Solutions (3), Complex Solutions (4), and Common Solutions (5). Under the Simple Solutions tab, there is a 'List of Compounds' section (6) with an 'Add' button (7) and an 'Eliminate' button. Below this is a table with columns for Compound, Molecular Weight, Purity, and Solvent. The table contains one entry: Na-Cloruro (NaCl) with a molecular weight of 58,443 g/mol and a purity of 100%. Below the table are input fields for Moles (8) and Mass, and for Final Concentration (mMolar) and Final volume (1 L). There are also fields for Initial Concentration (Molar) and Initial volume. At the bottom of the input section is a 'Calculate' button (9) and a dropdown menu for 'Moles/Mass/Initial Volume' (10). To the right of the dropdown is a 'Clear all' button (11). Below the input fields is a 'Result' section (12) which displays the calculated values: Moles: 50 mmoles, Initial volume: 10 mL. Below the result is a 'Comments' field (13) for user input.

- 1) Menu bar
- 2) Tools bar
- 3) Simple Solutions tab: To make calculation with one compound at the time
- 4) Complex Solutions tab: To make calculation with one or more compound at the time
- 5) Common Solutions tab: It has a list of the more common solutions used in Biochemical labs
- 6) List of compounds (added manually by the user). It has name and MW of the compounds
- 7) Add/Remove compound buttons. Allows to create and modify a list of compounds
- 8) Data field: All needed data have to be inserted here
- 9) Calculate button: Runs the calculation
- 10) Type of calculation: before run a calculation, you have to select the type of calculation first
- 11) Clear button: erase all input data from the data field
- 12) Result field: Output will appear here
- 13) Comments field: You can use this field to add comments before save a solution file

Complex Solution Windows

The screenshot shows the ZOLUTO software window. The interface includes a menu bar (1), a toolbar (2), and three tabs: Simple Solutions, Complex Solutions (3), and Commons Solutions. The Complex Solutions tab is active, showing a table with columns: Compound (4), Molecular Weight, Mass, Initial Concentration, Initial volume, and Final Concentration. The table contains three rows: Al-Fluoruro (AlF3), Na-Cloruro (NaCl), and Metanol (CH3OH). Above the table, there are input fields for 'Agregue aquí el nombre de la solución' (5) and 'Solvente' (6). Below the table, there is a 'Calculate' button (8), a dropdown for 'Moles/Mass/Initial Volume' (9), a 'Final volume' field set to 250 (10), and a 'Clear all' button (11). The 'Result' section (12) displays the calculation results, including the final volume and the amount of each compound. The 'Comments' section (13) is at the bottom.

Compound	Molecular Weight	Mass	Initial Concentration	Initial volume	Final Concentration
Al-Fluoruro (AlF3)	83,97674	q/mol	0	100	1
Na-Cloruro (NaCl)	58,443	q/mol	1	0	10
Metanol (CH3OH)	32,04	q/mol	0	0	1000

Result
 Agregue aquí el nombre de la solución
 Solvent: Solvente
 Final Volume: 250 mL
 Calculation of: Moles/Mass/Initial Volume

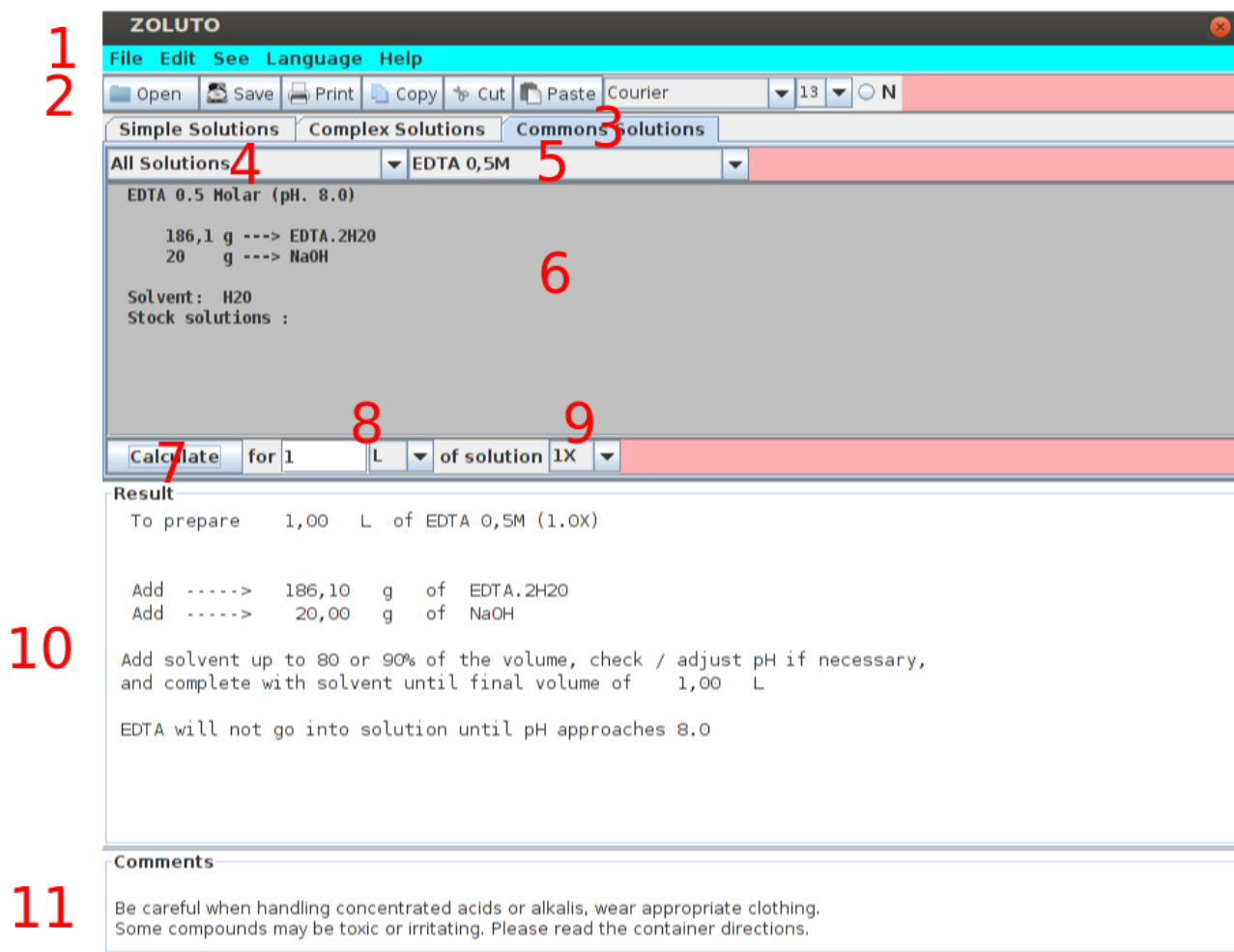
1) 20,99 g -----> Al-Fluoruro (AlF3)
 2) 2,50 mL -----> Na-Cloruro (NaCl) (1 Molar)
 3) 8,01 mg -----> Metanol (CH3OH)

Add Solvente to complete 250 mL

Comments

- 1) Menu bar
- 2) Tools bar
- 3) Complex Solutions tab: To make calculation with one or more compound at the time
- 4) List of compounds (added manually by the user). It has name and MW of the compounds. It input a name and MW at the last compound
- 5) Solution Name : To add the name of the solution
- 6) Solvent name : To add the name of the solvent
- 7) Data field: All needed data have to be inserted here
- 8) Type of calculation: before run a calculation (Calculate button), you have to select the type of calculation first
- 9) Add/Remove compounds to the solution: It add or remove the last compound of the list
- 10) Final Volume
- 11) Clear button: erase all input data from the data field
- 12) Result field: Output will appear here
- 13) Comments field: You can use this field to add comments before save a solution file

Commons Solution Windows



- 1) Menu bar
- 2) Tools bar
- 3) Common Solutions tab
- 4) Solutions Category: All solution are classified according its regular use in the lab
- 5) List of Solutions Name: After select a category, the list of available solution will show here
- 6) Solution Field: the information of the selected solution is shows here
- 7) Calculate button
- 8) Final Volume
- 9) Concentration Factor: In order to make more concentrated solutions
- 10) Result field: Output will appear here
- 11) Comments field: Same warning and comments will appear here