

## 16. FORMULA WEIGHTS

Formula Weight Calculations

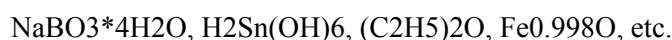
Please enter Formula:  Fractions

Elements:	wt-%	at-%	mol
Na	32.3715	28.5714	0.2857
O	45.0569	57.1429	0.5714
S	22.5716	14.2857	0.1429

Buttons: Exit, Help, Print, Clear, Copy, Paste, Calculate

Fig. 1. Formula Weights.

This simplest calculation option of HSC Chemistry is a versatile routine for calculating formula weights. As input, it accepts almost any form of chemical formula using conventional organic or inorganic expressions. Typical entries may be:



You can collect several results on the sheet. **Clear** will clear the whole sheet. You can print the results using **Print**. The Formula Weight option uses the same routine for calculating the formula weights and elemental composition as all other calculation options in the HSC. Therefore you can test the correct formula formats in this option. **Copy** will copy the results into the clipboard. Note that you can copy and paste cell ranges also.

You can select mol or kg units for column E as well as the total amount from the box at top right corner of the form. By pressing mouse right button you can, for example, modify number format.

### Limitations:

- Superscripts and subscripts are not allowed.
- Inner parentheses are not allowed, for example:  
 $\text{H}_2(\text{Sn}(\text{OH})_6)$  is not a valid formula. Use  $\text{H}_2\text{Sn}(\text{OH})_6$  instead.
- Last parentheses are always reserved for species type declarations**, for example:

As(g)	Arsenic gas	C	Carbon
O <sub>2</sub> (g)	Oxygen gas	C(D)	Diamond
Fe(l)	Liquid iron	FeS <sub>2</sub>	Pyrite
OH(-a)	Aqueous OH ion	FeS <sub>2</sub> (M)	Marcasite

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August 10, 2006

06120-ORC-T

If you want to write the following formula;  
please write it in one of the following ways:  
(Last parenthesis are reserved for suffix)

AlO(OH)	Not valid
AlO2H	Valid
AlO*(OH)	Valid
AlO*OH	Valid