

## **Supplementary Read-Me File: Instructions for Supplementary Table 6**

### **An evolutionary system of mineralogy, Part VII: The evolution of the igneous minerals (> 2500 Ma)**

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Supplementary Table 6 is an xlsx file that documents our efforts to condense 1665 approved IMA-CNMNC mineral species that form as primary igneous minerals (Supplementary Table 1) into fewer mineral natural kinds (Supplementary Table 2) by lumping groups of two or more species that represent continuous chemical solid solutions and that form in the same paragenetic environments.

Column A (rows 2 through 1003) lists 1002 IMA species that are subject to lumping. Column D gives the chemical formula of the IMA-approved species and Column C lists the number of different paragenetic modes known for that minerals, as modified from Hazen and Morrison (2022)

Column B lists the resulting names of mineral natural kinds. For example, in Rows 2 and 3 we lump the two IMA-approved species actinolite and ferro-actinolite into one natural kind, *actinolite*. Similarly, in Rows 4 through 11, eight species of the aeschynite group are lumped into *aeschynite*.

#### Reference:

Hazen, R.M., and Morrison, S.M. (2022) On the paragenetic modes of minerals: A mineral evolution perspective. *American Mineralogist*, 107, 1262-1287.