**APPENDIX I**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Ortopyroxene | Clinopyroxene | Olivine | Plagioclase |
|  | *(n=949)* | *(n=224)* | *(n=434)* | *(n=408)* |
|  | Chemical composition (wt-% ) | | | |
|  |  |  |  |  |
| **SiO2** | 57.33 | 54.76 | 41.46 | 63.54 |
| **Al2O3** | 1.29 | 0.90 | 0.28 | 22.48 |
| **Cr2O3** | 0.35 | 1.08 | 0.11 | 0.11 |
| **TiO2** | 0.20 | 0.69 | 0.13 | 0.15 |
| **FeO** | 4.71 | 1.83 | 4.73 | 0.49 |
| **MgO** | 34.16 | 18.05 | 52.93 | 0.21 |
| **MnO** | 0.51 | 0.24 | 0.37 | 0.10 |
| **CaO** | 0.92 | 21.76 | 0.10 | 3.16 |
| **Na2O** | 0.51 | 0.62 | 0.58 | 8.81 |
| **K2O** | 0.03 | 0.44 | 0.06 | 0.65 |
| **Total** | 100.00 | 100.37 | 100.74 | 99.69 |
|  |  |  |  |  |
| **En** | 90.56±1.2 | 49.49±8.7 |  |  |
| **Fs** | 6.95±1.1 | 3.18±0.6 |  |  |
| **Wo** | 1.65±0.2 | 45.08±3.8 |  |  |
| **Fo** |  |  | 94.34±1.21 |  |
| **Fa** |  |  | 4.44±1.4 |  |
| **An** |  |  |  | 16.45±3 |
| **Ab** |  |  |  | 82.28±4.5 |
| **Or** |  |  |  | 3.9±0.6 |

Table I: Representative electron microprobe analyses (wt-%) of silicates inclusion as estimated from previous analyzes (e.g. Saavedra et al. 2022). *n* is the number of analyses. Uncertainties of endmember compositions are 1σ.