|  |  |  |
| --- | --- | --- |
| Starting parameters | AVER-LT | MODI-LT |
|  | Description: Averaged composition of the Dali low-Ti picrites, referred from Hanski et al., 2010 | Description: Modified values with changes on certain values to the left |
| (wt%) |  | ± | Modified values |
| SiO2 | 44.00 | (-0.5) | 43.5 |
| TiO2 | 0.93 |  | 0.93 |
| Al2O3 | 8.66 | (-2) | 6.66 |
| Fe2O3 (0.1\*Fe2O3T) | 1.13 | (-0.1) | 1.03 |
| FeO (0.9\*Fe2O3T) | 10.18 | (-0.9) | 9.28 |
| MnO | 0.16 |  | 0.16 |
| MgO | 20.51 | (+4) | 24.5 |
| CaO | 7.72 | (-1.5) | 6.22 |
| Na2O | 0.63 |  | 0.63 |
| K2O | 0.46 |  | 0.46 |
| P2O5 | 0.14 |  | 0.14 |
| LOI | 5.22 (not calculated) | / | / |
| Water content | 1.00 |  | 1.00 |
| Starting temperature(100% wet liquidus) | 1380.9°C | 1417.8°C |
| Pressure | 2 kbar | 2 kbar |
| fO2 | +1 FMQ  | +1 FMQ |

Table S4: Starting compositions and parameters for the pMELTs thermodynamic modeling.