Table 1. Amphibole chemical analyses

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sample Ref. | JPC5-a | JPC5-a | JPC5-a | JPC5-a | JPC5-b | JPC5-b | JPC5-b |
|  |  |  |  |  |  |  |  |
| **Oxides weight %** | | | | | | | |
| SiO2 | 47.898 | 47.658 | 47.465 | 47.471 | 47.274 | 47.355 | 47.149 |
| TiO2 | 0.647 | 0.572 | 0.786 | 0.691 | 0.737 | 0.766 | 0.744 |
| Al2O3 | 6.677 | 6.937 | 7.226 | 7.316 | 7.616 | 7.307 | 7.409 |
| Cr2O3 | 0.042 | 0.040 | 0.129 | 0.148 | 0.147 | 0.132 | 0.168 |
| FeO | 20.413 | 21.033 | 19.994 | 20.448 | 20.624 | 20.750 | 20.301 |
| MnO | 0.681 | 0.630 | 0.753 | 0.774 | 0.644 | 0.759 | 0.665 |
| MgO | 8.968 | 8.242 | 8.742 | 8.326 | 7.898 | 8.017 | 8.308 |
| CaO | 11.345 | 11.504 | 11.487 | 11.567 | 11.848 | 11.579 | 11.318 |
| Na2O | 0.642 | 0.664 | 0.702 | 0.654 | 0.606 | 0.682 | 0.754 |
| K2O | 0.298 | 0.254 | 0.355 | 0.342 | 0.351 | 0.340 | 0.359 |
| Total\* | 97.739 | 97.685 | 97.758 | 97.856 | 97.859 | 97.750 | 97.348 |
|  |  |  |  |  |  |  |  |
| **Structural formula based on 23 oxygens** | | | | | | | |
| Si | 7.132 | 7.146 | 7.087 | 7.102 | 7.099 | 7.106 | 7.080 |
| AlIV | 0.868 | 0.854 | 0.913 | 0.898 | 0.901 | 0.894 | 0.920 |
| AlVI | 0.304 | 0.371 | 0.359 | 0.392 | 0.455 | 0.402 | 0.398 |
| Fe3+ | 0.546 | 0.409 | 0.413 | 0.368 | 0.194 | 0.309 | 0.391 |
| Ti | 0.072 | 0.065 | 0.088 | 0.078 | 0.083 | 0.086 | 0.084 |
| Cr | 0.005 | 0.005 | 0.015 | 0.018 | 0.017 | 0.016 | 0.020 |
| Mg | 1.991 | 1.842 | 1.946 | 1.857 | 1.770 | 1.794 | 1.861 |
| Fe2+ | 1.996 | 2.228 | 2.084 | 2.190 | 2.398 | 2.295 | 2.160 |
| Mn | 0.086 | 0.080 | 0.095 | 0.098 | 0.082 | 0.097 | 0.085 |
| CaB | 1.810 | 1.848 | 1.838 | 1.854 | 1.908 | 1.862 | 1.822 |
| NaB | 0.185 | 0.152 | 0.162 | 0.146 | 0.092 | 0.138 | 0.178 |
| NaA | 0.000 | 0.041 | 0.041 | 0.044 | 0.085 | 0.061 | 0.042 |
| KA | 0.057 | 0.049 | 0.068 | 0.065 | 0.067 | 0.065 | 0.069 |
|  |  |  |  |  |  |  |  |
| FeT/(FeT+Mg) | 0.56 | 0.59 | 0.56 | 0.58 | 0.59 | 0.59 | 0.58 |
| Fe2+/(Fe2++Mg) | 0.50 | 0.55 | 0.52 | 0.54 | 0.58 | 0.56 | 0.54 |
| (Na + K)A | 0.06 | 0.09 | 0.11 | 0.11 | 0.15 | 0.13 | 0.11 |
| (Ca+Na)B | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| #Mg (Mg/(Mg+Fe2+) | 0.50 | 0.45 | 0.48 | 0.46 | 0.42 | 0.44 | 0.46 |

Table 1. Amphibole chemical analyses (Cont.)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sample Ref. | JPC5-b | JPC5-b | JPC5-b | JPC5-b | JPC5-b | JPC5-c | JPC5-c |
|  |  |  |  |  |  |  |  |
| **Oxides weight %** | | | | | | | |
| SiO2 | 47.501 | 46.040 | 46.024 | 47.322 | 47.148 | 49.688 | 47.799 |
| TiO2 | 0.743 | 0.840 | 0.920 | 0.775 | 0.617 | 0.506 | 0.694 |
| Al2O3 | 7.286 | 8.068 | 8.457 | 7.316 | 7.543 | 5.332 | 7.265 |
| Cr2O3 | 0.108 | 0.189 | 0.149 | 0.166 | 0.193 | 0.167 | 0.096 |
| FeO | 20.605 | 21.585 | 21.035 | 21.005 | 21.126 | 19.981 | 19.957 |
| MnO | 0.676 | 0.734 | 0.590 | 0.783 | 0.694 | 0.621 | 0.626 |
| MgO | 8.305 | 7.068 | 7.295 | 7.927 | 7.600 | 9.055 | 8.513 |
| CaO | 11.260 | 11.510 | 11.426 | 11.525 | 11.862 | 11.748 | 11.718 |
| Na2O | 0.743 | 0.759 | 0.796 | 0.671 | 0.627 | 0.420 | 0.627 |
| K2O | 0.341 | 0.413 | 0.457 | 0.348 | 0.327 | 0.191 | 0.351 |
| Total\* | 97.713 | 97.231 | 97.220 | 97.853 | 97.737 | 97.708 | 97.677 |
|  |  |  |  |  |  |  |  |
| **Structural formula based on 23 oxygens** | | | | | | | |
|  |  |  |  |  |  |  |  |
| Si | 7.099 | 6.996 | 6.973 | 7.095 | 7.107 | 7.406 | 7.153 |
| AlIV | 0.901 | 1.004 | 1.027 | 0.905 | 0.893 | 0.594 | 0.847 |
| AlVI | 0.389 | 0.442 | 0.487 | 0.388 | 0.447 | 0.343 | 0.435 |
| Fe3+ | 0.433 | 0.292 | 0.274 | 0.355 | 0.204 | 0.207 | 0.237 |
| Ti | 0.084 | 0.096 | 0.105 | 0.087 | 0.070 | 0.057 | 0.078 |
| Cr | 0.013 | 0.023 | 0.018 | 0.020 | 0.023 | 0.020 | 0.011 |
| Mg | 1.852 | 1.601 | 1.648 | 1.772 | 1.708 | 2.012 | 1.899 |
| Fe2+ | 2.144 | 2.451 | 2.392 | 2.278 | 2.459 | 2.283 | 2.260 |
| Mn | 0.086 | 0.094 | 0.076 | 0.099 | 0.089 | 0.078 | 0.079 |
| CaB | 1.804 | 1.874 | 1.855 | 1.851 | 1.916 | 1.876 | 1.879 |
| NaB | 0.196 | 0.126 | 0.145 | 0.149 | 0.084 | 0.121 | 0.121 |
| NaA | 0.020 | 0.098 | 0.089 | 0.046 | 0.099 | 0.000 | 0.061 |
| KA | 0.065 | 0.080 | 0.088 | 0.067 | 0.063 | 0.036 | 0.067 |
|  |  |  |  |  |  |  |  |
| FeT/(FeT+Mg) | 0.58 | 0.63 | 0.62 | 0.60 | 0.61 | 0.55 | 0.57 |
| Fe2+/(Fe2++Mg) | 0.54 | 0.60 | 0.59 | 0.56 | 0.59 | 0.53 | 0.54 |
| (Na + K)A | 0.08 | 0.18 | 0.18 | 0.11 | 0.16 | 0.04 | 0.13 |
| (Ca+Na)B | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| #Mg (Mg/(Mg+Fe2+) | 0.46 | 0.40 | 0.41 | 0.44 | 0.41 | 0.47 | 0.46 |

Table 1. Amphibole chemical analyses (Cont.)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample Ref. | JPC5-c | | JPC5-c | JPC5-c | JPC5-c | JPC5-e | JPC5-e | JPC5-e | JPC5-e |
|  |  | |  |  |  |  |  |  |  |
| **Oxides weight %** | | | | | | | | | |
| SiO2 | 47.379 | | 46.483 | 50.166 | 47.463 | 48.079 | 46.254 | 47.308 | 47.452 |
| TiO2 | 0.781 | | 0.884 | 0.387 | 0.750 | 0.589 | 0.993 | 0.758 | 0.648 |
| Al2O3 | 7.595 | | 8.219 | 4.984 | 7.273 | 6.984 | 8.436 | 7.500 | 7.310 |
| Cr2O3 | 0.129 | | 0.114 | 0.076 | 0.180 | 0.146 | 0.146 | 0.113 | 0.127 |
| FeO | 19.947 | | 20.191 | 19.683 | 20.004 | 20.283 | 20.549 | 20.373 | 20.469 |
| MnO | 0.597 | | 0.589 | 0.722 | 0.595 | 0.592 | 0.633 | 0.530 | 0.537 |
| MgO | 8.259 | | 7.776 | 9.199 | 8.375 | 8.810 | 7.740 | 8.247 | 8.044 |
| CaO | 11.633 | | 11.611 | 11.597 | 11.618 | 11.546 | 11.718 | 12.042 | 12.082 |
| Na2O | 0.644 | | 0.680 | 0.465 | 0.676 | 0.642 | 0.779 | 0.550 | 0.598 |
| K2O | 0.367 | | 0.449 | 0.186 | 0.359 | 0.314 | 0.434 | 0.356 | 0.324 |
| Total\* | 97.431 | | 97.052 | 97.470 | 97.395 | 98.031 | 97.790 | 97.875 | 97.651 |
|  |  | |  |  |  |  |  |  |  |
| **Structural formula based on 23 oxygens** | | | | | | | | | |
|  | |  |  |  |  |  |  |  |  |
| Si | | 7.119 | 7.035 | 7.481 | 7.137 | 7.146 | 6.966 | 7.103 | 7.155 |
| AlIV | | 0.881 | 0.965 | 0.519 | 0.863 | 0.854 | 1.034 | 0.897 | 0.845 |
| AlVI | | 0.464 | 0.501 | 0.357 | 0.425 | 0.369 | 0.464 | 0.430 | 0.454 |
| Fe3+ | | 0.221 | 0.198 | 0.190 | 0.237 | 0.410 | 0.234 | 0.180 | 0.089 |
| Ti | | 0.088 | 0.101 | 0.043 | 0.085 | 0.066 | 0.112 | 0.086 | 0.073 |
| Cr | | 0.015 | 0.014 | 0.009 | 0.021 | 0.017 | 0.017 | 0.013 | 0.015 |
| Mg | | 1.850 | 1.754 | 2.045 | 1.877 | 1.952 | 1.738 | 1.846 | 1.808 |
| Fe2+ | | 2.285 | 2.357 | 2.264 | 2.279 | 2.111 | 2.354 | 2.378 | 2.492 |
| Mn | | 0.076 | 0.075 | 0.091 | 0.076 | 0.075 | 0.081 | 0.067 | 0.069 |
| CaB | | 1.873 | 1.883 | 1.853 | 1.872 | 1.839 | 1.891 | 1.937 | 1.952 |
| NaB | | 0.127 | 0.117 | 0.134 | 0.128 | 0.161 | 0.109 | 0.063 | 0.048 |
| NaA | | 0.060 | 0.082 | 0.000 | 0.069 | 0.024 | 0.118 | 0.097 | 0.126 |
| KA | | 0.070 | 0.087 | 0.035 | 0.069 | 0.060 | 0.083 | 0.068 | 0.062 |
|  | |  |  |  |  |  |  |  |  |
| FeT/(FeT+Mg) | | 0.58 | 0.59 | 0.55 | 0.57 | 0.56 | 0.60 | 0.58 | 0.59 |
| Fe2+/(Fe2++Mg) | | 0.55 | 0.57 | 0.53 | 0.55 | 0.52 | 0.58 | 0.56 | 0.58 |
| (Na + K)A | | 0.13 | 0.17 | 0.04 | 0.14 | 0.08 | 0.20 | 0.17 | 0.19 |
| (Ca+Na)B | | 2.00 | 2.00 | 1.99 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| #Mg (Mg/(Mg+Fe2+) | | 0.45 | 0.43 | 0.47 | 0.45 | 0.48 | 0.42 | 0.44 | 0.42 |

Table 2. Garnet chemical analyses.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sample Ref. | JPC5-b | JPC5-b | JPC5-b | JPC5-b | JPC5-b | JPC5-b | JPC5-c |
|  |  |  |  |  |  |  |  |
| **Oxides weight %** | | | | | | | |
| SiO2 | 37.461 | 37.864 | 37.509 | 37.638 | 37.506 | 37.495 | 37.262 |
| TiO2 | 0.00 | 0.00 | 0.073 | 0.021 | 0.027 | 0.023 | 0.037 |
| Al2O3 | 21.19 | 21.235 | 21.003 | 21.178 | 21.182 | 21.197 | 20.718 |
| Cr2O3 | 0.124 | 0.063 | 0.087 | 0.104 | 0.073 | 0.075 | 0.089 |
| FeO | 23.834 | 23.54 | 23.671 | 23.685 | 23.825 | 23.631 | 23.887 |
| MnO | 5.671 | 5.784 | 5.566 | 5.446 | 5.772 | 5.745 | 6.446 |
| MgO | 1.244 | 1.21 | 1.267 | 1.222 | 1.097 | 1.153 | 1.124 |
| CaO | 9.891 | 10.022 | 9.751 | 9.871 | 10.05 | 9.884 | 9.583 |
| Total | 99.415 | 99.718 | 98.927 | 99.165 | 99.532 | 99.203 | 99.146 |
|  |  |  |  |  |  |  |  |
| **Structural formula based on 24 oxygens** | | | | | | | |
|  |  |  |  |  |  |  |  |
| Si | 3.005 | 3.027 | 3.024 | 3.026 | 3.008 | 3.015 | 3.006 |
| Al | 2.003 | 2.001 | 1.996 | 2.007 | 2.002 | 2.009 | 1.970 |
| Ti | 0.000 | 0.000 | 0.004 | 0.001 | 0.002 | 0.001 | 0.002 |
| Cr | 0.008 | 0.004 | 0.006 | 0.007 | 0.005 | 0.005 | 0.006 |
| Fe3+ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 |
| Mg | 0.149 | 0.144 | 0.152 | 0.146 | 0.131 | 0.138 | 0.135 |
| Fe2+ | 1.599 | 1.574 | 1.596 | 1.592 | 1.598 | 1.589 | 1.604 |
| Mn | 0.385 | 0.392 | 0.380 | 0.371 | 0.392 | 0.391 | 0.440 |
| Ca | 0.850 | 0.858 | 0.842 | 0.850 | 0.863 | 0.852 | 0.828 |
|  |  |  |  |  |  |  |  |
| **Molecular components** | | | | | | | |
| Xspessartine | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.15 |
| Xpyrope | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | 0.04 |
| Xalmandine | 0.54 | 0.53 | 0.54 | 0.54 | 0.54 | 0.53 | 0.54 |
| Xgrossular | 0.28 | 0.29 | 0.28 | 0.28 | 0.29 | 0.28 | 0.27 |

Table 2. Garnet chemical analyses (cont).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sample Ref. | JPC5-c | JPC5-c | JPC5-c | JPC5-c | JPC5-c | |
|  |  |  |  |  |  | |
| **Oxides weight %** | | | | | |
| SiO2 | 37.733 | 37.676 | 37.799 | 37.602 | 37.659 | |
| TiO2 | 0.042 | 0.034 | 0.037 | 0.058 | 0.057 | |
| Al2O3 | 20.901 | 20.82 | 20.802 | 20.652 | 20.616 | |
| Cr2O3 | 0.091 | 0.076 | 0.125 | 0.082 | 0.103 | |
| FeO | 23.637 | 23.721 | 23.444 | 23.944 | 22.796 | |
| MnO | 6.022 | 6.143 | 5.965 | 6.039 | 5.634 | |
| MgO | 1.359 | 1.387 | 1.402 | 1.42 | 1.397 | |
| CaO | 9.653 | 9.529 | 10.059 | 9.257 | 10.622 | |
| Total | 99.438 | 99.386 | 99.633 | 99.054 | 98.884 | |
|  |  |  |  |  |  | |
| **Structural formula based on 24 oxygens** | | | | | |
|  |  |  |  |  |  | |
| Si | 3.028 | 3.026 | 3.025 | 3.032 | 3.031 | |
| Al | 1.976 | 1.971 | 1.962 | 1.962 | 1.956 | |
| Ti | 0.003 | 0.002 | 0.002 | 0.004 | 0.003 | |
| Cr | 0.006 | 0.005 | 0.008 | 0.005 | 0.007 | |
| Fe3+ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| Mg | 0.163 | 0.166 | 0.167 | 0.171 | 0.168 | |
| Fe2+ | 1.586 | 1.593 | 1.569 | 1.614 | 1.535 | |
| Mn | 0.409 | 0.418 | 0.404 | 0.412 | 0.384 | |
| Ca | 0.830 | 0.820 | 0.862 | 0.800 | 0.916 | |
|  |  |  |  |  |  | |
| **Molecular components** | | | | | |
| Xspessartine | 0.14 | 0.14 | 0.14 | 0.14 | 0.13 | |
| Xpyrope | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | |
| Xalmandine | 0.53 | 0.54 | 0.53 | 0.55 | 0.52 | |
| Xgrossular | 0.27 | 0.26 | 0.27 | 0.25 | 0.29 | |

Table 3. Pyroxene chemical analyses.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample Ref. | | JPC5-b | | JPC5-b | | JPC5-b | | JPC5-b | | JPC5-c |
|  | |  | |  | |  | |  | |  |
| **Oxides weight %** | | | | | | | | | | |
| SiO2 | | 51.049 | | 51.294 | | 51.014 | | 50.9 | | 51.449 |
| TiO2 | | 0.074 | | 0.042 | | 0.035 | | 0.081 | | 0.006 |
| Al2O3 | | 0.503 | | 0.503 | | 0.602 | | 0.503 | | 0.359 |
| Cr2O3 | | 0.092 | | 0.085 | | 0.1 | | 0.058 | | 0.133 |
| FeO | | 15.652 | | 15.925 | | 16.284 | | 16.699 | | 16.091 |
| MnO | | 0.923 | | 0.946 | | 0.879 | | 0.909 | | 0.629 |
| MgO | | 8.316 | | 8.289 | | 8.236 | | 8.261 | | 8.529 |
| CaO | | 22.805 | | 22.38 | | 22.126 | | 22.017 | | 22.631 |
| Na2O | | 0.104 | | 0.076 | | 0.087 | | 0.067 | | 0.07 |
| K2O | | 0.001 | | 0.00 | | 0.005 | | 0.00 | | 0.002 |
| Total | | 99.598 | | 99.54 | | 99.401 | | 99.535 | | 99.988 |
|  | |  | |  | |  | |  | |  |
| **Structural formula based on 6 oxygens** | | | | | | | | | | |
|  | |  | |  | |  | |  | |  |
| Si | | 1.989 | | 2.000 | | 1.994 | | 1.989 | | 1.997 |
| Ti | | 0.002 | | 0.001 | | 0.001 | | 0.002 | | 0.000 |
| Al | | 0.023 | | 0.023 | | 0.028 | | 0.023 | | 0.016 |
| Cr | | 0.003 | | 0.003 | | 0.003 | | 0.002 | | 0.004 |
| Fe3+ | | 0.000 | | 0.023 | | 0.014 | | 0.003 | | 0.009 |
| Fe2+ | | 0.510 | | 0.519 | | 0.532 | | 0.546 | | 0.522 |
| Mn | | 0.030 | | 0.031 | | 0.029 | | 0.030 | | 0.021 |
| Mg | | 0.483 | | 0.482 | | 0.480 | | 0.481 | | 0.493 |
| Ca | | 0.952 | | 0.935 | | 0.926 | | 0.922 | | 0.941 |
| Na | | 0.008 | | 0.006 | | 0.007 | | 0.005 | | 0.005 |
| K | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | 0.000 |
|  | |  | |  | |  | |  | |  |
| **Molecular components** | | | | | | | | | | |
| Xwollastonite | | 0.482 | | 0.48 | | 0.47 | | 0.47 | | 0.48 |
| Xferrosilite | | 0.274 | | 0.28 | | 0.29 | | 0.29 | | 0.27 |
| Xenstatite | | 0.245 | | 0.24 | | 0.24 | | 0.24 | | 0.25 |
|  |  | |  | |  | |  | |

Table 3. Pyroxene chemical analyses. (Cont.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sample Ref. | JPC5-c | JPC5-c | JPC5-e | JPC5-e | JPC5-e |
|  |  |  |  |  |  |
| **Oxides weight %** | | | | | |
| SiO2 | 51.255 | 51.027 | 51.051 | 50.888 | 50.983 |
| TiO2 | 0.05 | 0.048 | 0.04 | 0.036 | 0.00 |
| Al2O3 | 0.434 | 0.437 | 0.385 | 0.375 | 0.443 |
| Cr2O3 | 0.083 | 0.089 | 0.093 | 0.11 | 0.045 |
| FeO | 16.499 | 16.418 | 15.386 | 15.499 | 15.589 |
| MnO | 0.824 | 0.875 | 0.78 | 0.742 | 0.677 |
| MgO | 8.519 | 8.498 | 8.874 | 8.937 | 8.791 |
| CaO | 22.201 | 22.12 | 22.46 | 22.411 | 22.431 |
| Na2O | 0.088 | 0.115 | 0.083 | 0.093 | 0.131 |
| K2O | 0.01 | 0.006 | 0.00 | 0.001 | 0.00 |
| Total | 100.009 | 99.696 | 99.196 | 99.093 | 99.172 |
|  |  |  |  |  |  |
| **Structural formula based on 6 oxygens** | | | | | |
|  |  |  |  |  |  |
| Si | 1.990 | 1.987 | 1.991 | 1.985 | 1.989 |
| Ti | 0.001 | 0.001 | 0.001 | 0.001 | 0.000 |
| Al | 0.020 | 0.020 | 0.018 | 0.017 | 0.020 |
| Cr | 0.003 | 0.003 | 0.003 | 0.003 | 0.001 |
| Fe3+ | 0.002 | 0.009 | 0.002 | 0.014 | 0.011 |
| Fe2+ | 0.536 | 0.535 | 0.502 | 0.506 | 0.508 |
| Mn | 0.027 | 0.029 | 0.026 | 0.025 | 0.022 |
| Mg | 0.493 | 0.493 | 0.516 | 0.520 | 0.511 |
| Ca | 0.923 | 0.923 | 0.938 | 0.937 | 0.937 |
| Na | 0.007 | 0.009 | 0.006 | 0.007 | 0.010 |
| K | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
|  |  |  |  |  |  |
| **Molecular components** | | | | | |
| Xwollastonite | 0.47 | 0.47 | 0.47 | 0.47 | 0.47 |
| Xferrosilite | 0.28 | 0.28 | 0.27 | 0.27 | 0.27 |
| Xenstatite | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 |

Table 4. Feldspar chemical analyses.

|  |  |  |
| --- | --- | --- |
| Sample Ref. | JPC5-c | JPC5-c |
|  |  |  |  |  | | |
| **Oxides weight %** | | | | |
| SiO2 | 51.255 | 51.027 |
| Al2O3 | 0.434 | 0.437 |
| Fe2O3 | 16.499 | 16.418 |
| CaO | 22.201 | 22.120 |
| Na2O | 0.088 | 0.115 |
| K2O | 0.010 | 0.006 |
| Total | 100.009 | 99.696 |
|  |  |  |  |  | |
| **Structural formula based on 32 oxygens** | | | | |
|  |  |  |
| Si | 11.636 | 11.633 |
| Al | 0.116 | 0.117 |
| Fe2+ | 3.132 | 3.130 |
| Ca | 5.400 | 5.402 |
| Na | 0.039 | 0.051 |
| K | 0.003 | 0.002 |
|  |  |  |  | |
| **Molecular components** | | | | |
| XAnorthite | 0.992 | 0.990 |
| XAlbite | 0.007 | 0.009 |
| XOrthoclase | 0.001 | 0.000 |

Table 5. Summary of Analytical conditions for electron probe micronalysis (JEOL JXA 8200)

|  |  |
| --- | --- |
| **Parameters** | **Conditions** |
| Acceleration voltage | 15 kV |
| Beam Current | 25nA |
| Beam size | 5 µm |
| Standards | Natural and synthetic silicates |
| Errors | < 1.5% for major elements |