Table 1: Sample composition, experimental temperature and phases found in the SiO2-SrO-Al2O3 system.

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| --- | --- | --- | --- |
| **No.** | **Sample composition\*** | **T (K)\***\* | **Phases present** |
| **SiO2 (wt%)** | **Al2O3 (wt%)** |
| 1 | 53.0 | 2.5 | 1723 | Liquid |
| 2 | 58.0 | 2.6 | 1723 | Liquid |
| 3 | 58.0 | 4.9 | 1723 | Liquid |
| 4 | 62.9 | 2.5 | 1723 | SiO2- Liquid |
| 5 | 62.9 | 7.5 | 1723 | Liquid |
| 6 | 63.0 | 5.0 | 1723 | SiO2- Liquid |
| 7 | 65.1 | 9.9 | 1723 | Liquid |
| 8 | 67.4 | 9.9 | 1723 | SiO2- Liquid |
| 9 | 67.4 | 15.1 | 1723 | Liquid |
| 10 | 67.5 | 12.5 | 1723 | Liquid |
| 11 | 68.0 | 7.5 | 1723 | SiO2- Liquid |
| 12 | 68.1 | 4.9 | 1723 | SiO2- Liquid |
| 13 | 69.9 | 10.0 | 1723 | SiO2- Liquid |
| 14 | 70.0 | 15.0 | 1723 | SiO2- Liquid |
| 15 | 70.1 | 12.5 | 1723 | SiO2- Liquid |
| 16 | 70.1 | 17.4 | 1723 | SiO2- Mullite- Liquid |
| 17 | 71.0 | 17.6 | 1723 | SiO2- Mullite- Liquid |
| 18 | 71.1 | 14.9 | 1723 | SiO2- Liquid |
| 19 | 71.1 | 20.0 | 1723 | SiO2- Mullite- Liquid |
| 20 | 72.8 | 15.1 | 1723 | SiO2- Liquid |
| 21 | 72.9 | 12.5 | 1723 | SiO2- Liquid |
| 22 | 72.9 | 17.6 | 1723 | SiO2- Mullite- Liquid |
| 23 | 73.0 | 7.4 | 1723 | SiO2- Liquid |
| 24 | 73.1 | 19.9 | 1723 | SiO2- Mullite- Liquid |
| 25 | 74.9 | 12.5 | 1723 | SiO2- Liquid |
| 26 | 75.0 | 10.0 | 1723 | SiO2- Liquid |
| 27 | 75.0 | 14.9 | 1723 | SiO2- Mullite- Liquid |
| 28 | 75.1 | 17.4 | 1723 | SiO2- Mullite- Liquid |
| 29 | 77.9 | 7.6 | 1723 | SiO2- Liquid |
| 30 | 80.0 | 9.9 | 1723 | SiO2- Liquid |
| 31 | 80.0 | 12.5 | 1723 | SiO2- Mullite- Liquid |
| 32 | 80.1 | 15.0 | 1723 | SiO2- Mullite- Liquid |
| 33 | 82.8 | 10.0 | 1723 | SiO2- Liquid |
| 34 | 83.0 | 12.4 | 1723 | SiO2- Mullite- Liquid |
| 35 | 63.0 | 2.5 | 1823 | Liquid |
| 36 | 65.6 | 2.4 | 1823 | SiO2- Liquid |
| 37 | 68.1 | 2.6 | 1823 | SiO2- Liquid |
| 38 | 68.1 | 4.9 | 1823 | Liquid |
| 39 | 73.1 | 2.4 | 1823 | SiO2- Liquid |
| 40 | 73.1 | 5.0 | 1823 | SiO2- Liquid |
| 41 | 73.1 | 6.0 | 1823 | Liquid |
| 42 | 77.9 | 7.6 | 1823 | Liquid |
| 43 | 78.1 | 4.9 | 1823 | SiO2- Liquid |
| 44 | 78.1 | 6.0 | 1823 | SiO2- Liquid |
| 45 | 78.1 | 9.9 | 1823 | Liquid |
| 46 | 78.2 | 2.4 | 1823 | SiO2- Liquid |
| 47 | 79.9 | 12.5 | 1823 | Liquid |
| 48 | 79.9 | 15.0 | 1823 | Mullite- Liquid |
| 49 | 80.1 | 9.9 | 1823 | Liquid |
| 50 | 80.2 | 7.4 | 1823 | SiO2- Liquid |
| 51 | 82.9 | 5.0 | 1823 | SiO2- Liquid |
| 52 | 82.9 | 10.1 | 1823 | SiO2- Liquid |
| 53 | 83.0 | 7.5 | 1823 | SiO2- Liquid |
| 54 | 83.0 | 9.9 | 1823 | SiO2- Liquid |
| 55 | 83.1 | 2.5 | 1823 | SiO2- Liquid |
| 56 | 83.1 | 12.4 | 1823 | SiO2- Mullite- Liquid |
| 57 | 83.1 | 14.9 | 1823 | SiO2- Mullite- Liquid |
| 58 | 87.8 | 10.1 | 1823 | SiO2- Mullite- Liquid |
| 59 | 88.0 | 2.3 | 1823 | SiO2- Liquid |
| 60 | 88.0 | 5.1 | 1823 | SiO2- Liquid |
| 61 | 88.1 | 7.5 | 1823 | SiO2- Liquid |
| 62 | 91.0 | 7.5 | 1823 | SiO2- Mullite- Liquid |
| 63 | 91.1 | 4.9 | 1823 | SiO2- Liquid |
| 64 | 65.6 | 2.5 | 1873 | Liquid |
| 65 | 68.0 | 2.4 | 1873 | SiO2- Liquid |
| 66 | 72.9 | 5.1 | 1873 | Liquid |
| 67 | 73.0 | 2.5 | 1873 | SiO2- Liquid |
| 68 | 75.9 | 2.5 | 1873 | SiO2- Liquid |
| 69 | 75.9 | 5.1 | 1873 | Liquid |
| 70 | 76.1 | 4.8 | 1873 | Liquid |
| 71 | 76.2 | 7.4 | 1873 | Liquid |
| 72 | 78.1 | 4.9 | 1873 | SiO2- Liquid |
| 73 | 79.9 | 17.6 | 1873 | Mullite- Liquid |
| 74 | 80.0 | 5.0 | 1873 | SiO2- Liquid |
| 75 | 80.0 | 7.5 | 1873 | Liquid |
| 76 | 80.1 | 15.0 | 1873 | Mullite- Liquid |
| 77 | 80.2 | 7.4 | 1873 | Liquid |
| 78 | 82.5 | 11.5 | 1873 | Liquid |
| 79 | 82.6 | 6.9 | 1873 | SiO2- Liquid |
| 80 | 82.6 | 6.9 | 1873 | SiO2- Liquid |
| 81 | 82.7 | 8.4 | 1873 | SiO2- Liquid |
| 82 | 82.7 | 11.0 | 1873 | Liquid |
| 83 | 83.0 | 12.6 | 1873 | Mullite- Liquid |
| 84 | 85.0 | 6.0 | 1873 | SiO2- Liquid |
| 85 | 85.0 | 7.5 | 1873 | SiO2- Liquid |
| 86 | 85.0 | 8.0 | 1873 | SiO2- Liquid |
| 87 | 85.0 | 8.5 | 1873 | SiO2- Liquid |
| 88 | 85.0 | 11.0 | 1873 | Liquid |
| 89 | 85.0 | 11.5 | 1873 | Mullite- Liquid |
| 90 | 85.1 | 9.9 | 1873 | Liquid |
| 91 | 85.1 | 12.4 | 1873 | Mullite- Liquid |
| \* The sample composition uncertainty is ±0.1 wt%.\*\* The temperature uncertainty is ±2K. |