|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TABLE S1. Anisotropic–displacement parameters (Å2) for gem amphiboles from Mogok, Myanmar. | | | | | | | | | | | | | | |
| AM1 | | | | | | | | | | | | | | |
| Site | | *U*11 | | *U*22 | | *U*33 | | *U*23 | | *U*13 | | *U*12 | | *U*eq/iso |
| *T*(1) | | 0.00829(17) | | 0.00901(17) | | 0.00845(17) | | –0.00015(10) | | 0.00190(12) | | –0.00050(10) | | 0.00864(11) |
| *T*(2) | | 0.00685(17) | | 0.00745(17) | | 0.00671(16) | | 0.00049(10) | | 0.00211(11) | | –0.00006(10) | | 0.00694(11) |
| *M*(1) | | 0.0090(3) | | 0.0099(3) | | 0.0066(3) | | 0 | | 0.0029(2) | | 0 | | 0.00832(19) |
| *M*(2) | | 0.0062(3) | | 0.0060(3) | | 0.0056(3) | | 0 | | 0.00211(18) | | 0 | | 0.00583(19) |
| *M*(3) | | 0.0083(4) | | 0.0079(4) | | 0.0062(4) | | 0 | | 0.0014(3) | | 0 | | 0.0076(3) |
| *M*(4) | | 0.01284(19) | | 0.00994(18) | | 0.01170(18) | | 0 | | 0.00588(13) | | 0 | | 0.01099(13) |
| *A*(2) | |  | |  | |  | |  | |  | |  | | 0.034(2) |
| *A*(*m*) | |  | |  | |  | |  | |  | |  | | 0.0366(18) |
| O(1) | | 0.0084(4) | | 0.0148(4) | | 0.0082(4) | | –0.0016(3) | | 0.0026(3) | | –0.0027(3) | | 0.01039(19) |
| O(2) | | 0.0067(4) | | 0.0104(4) | | 0.0100(4) | | 0.0007(3) | | 0.0015(3) | | 0.0002(3) | | 0.00915(18) |
| O(3) | | 0.0104(6) | | 0.0107(6) | | 0.0110(6) | | 0 | | 0.0028(4) | | 0 | | 0.0107(3) |
| O(4) | | 0.0136(4) | | 0.0095(4) | | 0.0115(4) | | –0.0001(3) | | 0.0062(3) | | –0.0016(3) | | 0.01097(19) |
| O(5) | | 0.0104(4) | | 0.0155(4) | | 0.0098(4) | | 0.0046(3) | | 0.0011(3) | | 0.00002(3) | | 0.01221(19) |
| O(6) | | 0.0097(4) | | 0.0137(4) | | 0.0131(4) | | –0.0039(3) | | 0.0034(3) | | 0.00057(3) | | 0.01210(19) |
| O(7) | | 0.0117(6) | | 0.0133(6) | | 0.0160(6) | | 0 | | 0.0042(5) | | 0 | | 0.0136(3) |
|  | |  | |  | |  | |  | |  | |  | |  |
| AM2 | | | | | | | | | | | | | | |
| *T*(1) | 0.00784(19) | | 0.00778(19) | | 0.00774(19) | | –0.00008(12) | | 0.00167(14) | | –0.00066(12) | | 0.00787(11) | |
| *T*(2) | 0.00654(18) | | 0.00625(18) | | 0.00607(18) | | 0.00054(12) | | 0.00198(13) | | –0.00002(12) | | 0.00623(11) | |
| *M*(1) | 0.0089(4) | | 0.0072(3) | | 0.0064(3) | | 0 | | 0.0026(2) | | 0 | | 0.0074(2) | |
| *M*(2) | 0.0046(3) | | 0.0037(3) | | 0.0040(3) | | 0 | | 0.0013(2) | | 0 | | 0.0041(2) | |
| *M*(3) | 0.0078(5) | | 0.0062(5) | | 0.0057(5) | | 0 | | 0.0016(3) | | 0 | | 0.0066(3) | |
| *M*(4) | 0.0109(2) | | 0.0082(2) | | 0.0094(2) | | 0 | | 0.00443(14) | | 0 | | 0.00915(13) | |
| *A*(2) |  | |  | |  | |  | |  | |  | | 0.0216(16) | |
| *A*(*m*) |  | |  | |  | |  | |  | |  | | 0.021(2) | |
| O(1) | 0.0086(5) | | 0.0128(5) | | 0.0074(4) | | –0.0012(4) | | 0.0026(4) | | –0.0026(3) | | 0.0095(2) | |
| O(2) | 0.0073(4) | | 0.0084(5) | | 0.0089(5) | | 0.0005(4) | | 0.0012(4) | | –0.00009(3) | | 0.0084(2) | |
| O(3) | 0.0092(7) | | 0.0094(7) | | 0.0097(7) | | 0 | | 0.0023(5) | | 0 | | 0.0095(4) | |
| O(4) | 0.0129(5) | | 0.0081(5) | | 0.0103(5) | | 0.0004(4) | | 0.0059(4) | | –0.0004(4) | | 0.0099(2) | |
| O(5) | 0.0095(5) | | 0.0112(5) | | 0.0096(5) | | 0.0034(4) | | 0.0011(4) | | –0.0006(4) | | 0.0104(2) | |
| O(6) | 0.0093(5) | | 0.0127(5) | | 0.0116(5) | | –0.0036(4) | | 0.0027(4) | | 0.0011(4) | | 0.0112(2) | |
| O(7) | 0.0122(7) | | 0.0119(7) | | 0.0177(8) | | 0 | | 0.0040(6) | | 0 | | 0.0139(3) | |
|  |  | |  | |  | |  | |  | |  | |  | |
| AM3 | | | | | | | | | | | | | | |
| *T*(1) | 0.00823(19) | | 0.00846(19) | | 0.00824(19) | | –0.00023(11) | | 0.00178(13) | | –0.00059(11) | | 0.00838(12) | |
| *T*(2) | 0.00685(19) | | 0.00702(19) | | 0.00640(18) | | 0.00038(11) | | 0.00196(13) | | –0.00013(11) | | 0.00672(12) | |
| *M*(1) | 0.0086(3) | | 0.0081(3) | | 0.0069(3) | | 0 | | 0.0025(2) | | 0 | | 0.0078(2) | |
| *M*(2) | 0.0058(3) | | 0.0053(3) | | 0.0050(3) | | 0 | | 0.00172(19) | | 0 | | 0.0053(2) | |
| *M*(3) | 0.0077(5) | | 0.0076(5) | | 0.0062(4) | | 0 | | 0.0014(3) | | 0 | | 0.0072(3) | |
| *M*(4) | 0.0121(2) | | 0.0093(2) | | 0.0110(2) | | 0 | | 0.00526(14) | | 0 | | 0.01039(14) | |
| *A*(2) |  | |  | |  | |  | |  | |  | | 0.028(2) | |
| *A*(*m*) |  | |  | |  | |  | |  | |  | | 0.038(3) | |
| O(1) | 0.0081(4) | | 0.0137(5) | | 0.0078(4) | | –0.0006(3) | | 0.0023(3) | | –0.0022(3) | | 0.0099(2) | |
| O(2) | 0.0066(4) | | 0.0094(4) | | 0.0091(4) | | 0.0009(3) | | 0.0016(3) | | 0.00008(3) | | 0.0085(2) | |
| O(3) | 0.0112(7) | | 0.0100(7) | | 0.0110(7) | | 0 | | 0.0027(5) | | 0 | | 0.0108(4) | |
| O(4) | 0.0126(5) | | 0.0090(4) | | 0.0109(4) | | 0.0001(3) | | 0.0051(4) | | –0.0020(3) | | 0.0105(2) | |
| O(5) | 0.0106(5) | | 0.0133(5) | | 0.0093(4) | | 0.0042(3) | | 0.0008(3) | | –0.0006(3) | | 0.0114(2) | |
| O(6) | 0.0097(4) | | 0.0133(5) | | 0.0132(5) | | –0.0041(4) | | 0.0032(4) | | 0.0006(3) | | 0.0121(2) | |
| O(7) | 0.0108(6) | | 0.0136(7) | | 0.0158(7) | | 0 | | 0.0041(5) | | 0 | | 0.0133(3) | |
|  |  | |  | |  | |  | |  | |  | |  | |
| AM6 | | | | | | | | | | | | | | |
| *T*(1) | 0.00806(18) | | 0.00812(17) | | 0.00801(18) | | –0.00007(11) | | 0.00185(13) | | –0.00076(11) | | 0.00812(10) | |
| *T*(2) | 0.00685(17) | | 0.00686(17) | | 0.00640(17) | | 0.00053(11) | | 0.00214(12) | | 0.00015(11) | | 0.00663(10) | |
| *M*(1) | 0.0090(3) | | 0.0081(3) | | 0.0065(3) | | 0 | | 0.0028(2) | | 0 | | 0.0077(2) | |
| *M*(2) | 0.0053(3) | | 0.0045(3) | | 0.0046(3) | | 0 | | 0.00166(19) | | 0 | | 0.00477(19) | |
| *M*(3) | 0.0083(5) | | 0.0075(4) | | 0.0065(4) | | 0 | | 0.0014(3) | | 0 | | 0.0076(3) | |
| *M*(4) | 0.01107(19) | | 0.00828(18) | | 0.01034(19) | | 0 | | 0.00498(13) | | 0 | | 0.00949(12) | |
| *A*(2) |  | |  | |  | |  | |  | |  | | 0.0059(16) | |
| *A*(*m*) |  | |  | |  | |  | |  | |  | | 0.0204(12) | |
| O(1) | 0.0083(4) | | 0.0133(5) | | 0.0077(4) | | –0.0019(3) | | 0.0025(3) | | –0.0030(3) | | 0.0097(2) | |
| O(2) | 0.0071(4) | | 0.0091(4) | | 0.0091(4) | | 0.0006(3) | | 0.0012(3) | | 0.0002(3) | | 0.00862(19) | |
| O(3) | 0.0098(6) | | 0.0095(6) | | 0.0097(6) | | 0 | | 0.0029(5) | | 0 | | 0.0096(4) | |
| O(4) | 0.0137(5) | | 0.0088(4) | | 0.0115(4) | | 0.0003(3) | | 0.0065(4) | | –0.0005(3) | | 0.0107(2) | |
| O(5) | 0.0100(4) | | 0.0129(5) | | 0.0098(4) | | 0.0036(4) | | 0.0012(3) | | 0.0003(3) | | 0.0111(2) | |
| O(6) | 0.0095(4) | | 0.0133(5) | | 0.0124(5) | | –0.0037(4) | | 0.0030(4) | | 0.0009(3) | | 0.0117(2) | |
| O(7) | 0.0123(7) | | 0.0114(7) | | 0.0188(7) | | 0 | | 0.0036(6) | | 0 | | 0.0143(3) | |
|  |  | |  | |  | |  | |  | |  | |  | |
| AM7 | | | | | | | | | | | | | | |
| *T*(1) | 0.0083(2) | | 0.0085(2) | | 0.0081(2) | | –0.00003(12) | | 0.00174(14) | | –0.00068(13) | | 0.00842(13) | |
| *T*(2) | 0.0068(2) | | 0.0072(2) | | 0.0064(2) | | 0.00057(12) | | 0.00202(14) | | 0.00007(12) | | 0.00677(13) | |
| *M*(1) | 0.0091(4) | | 0.0101(4) | | 0.0068(4) | | 0 | | 0.0028(2) | | 0 | | 0.0086(2) | |
| *M*(2) | 0.0061(3) | | 0.0056(3) | | 0.0054(3) | | 0 | | 0.0018(2) | | 0 | | 0.0057(2) | |
| *M*(3) | 0.0084(5) | | 0.0079(5) | | 0.0066(5) | | 0 | | 0.0014(3) | | 0 | | 0.0077(3) | |
| *M*(4) | 0.0118(2) | | 0.0093(2) | | 0.0108(2) | | 0 | | 0.00524(15) | | 0 | | 0.01024(15) | |
| *A*(2) |  | |  | |  | |  | |  | |  | | 0.0090(16) | |
| *A*(*m*) |  | |  | |  | |  | |  | |  | | 0.0194(15) | |
| O(1) | 0.0084(5) | | 0.0144(5) | | 0.0079(5) | | –0.0018(4) | | 0.0023(4) | | –0.0029(4) | | 0.0102(2) | |
| O(2) | 0.0066(4) | | 0.0100(5) | | 0.0095(5) | | 0.0010(4) | | 0.0012(4) | | 0.0002(4) | | 0.0089(2) | |
| O(3) | 0.0124(7) | | 0.0102(7) | | 0.0102(7) | | 0 | | 0.0032(5) | | 0 | | 0.0109(4) | |
| O(4) | 0.0136(5) | | 0.0097(5) | | 0.0115(5) | | 0.0003(4) | | 0.0059(4) | | –0.0012(4) | | 0.0111(2) | |
| O(5) | 0.0103(5) | | 0.0138(5) | | 0.0095(5) | | 0.0040(4) | | 0.0009(4) | | 0.0002(4) | | 0.0115(2) | |
| O(6) | 0.0099(5) | | 0.0137(5) | | 0.0126(5) | | –0.0040(4) | | 0.0032(4) | | 0.0009(4) | | 0.0121(2) | |
| O(7) | 0.0128(7) | | 0.0125(7) | | 0.0192(8) | | 0 | | 0.0033(6) | | 0 | | 0.0150(3) | |
|  |  | |  | |  | |  | |  | |  | |  | |
| AM8 | | | | | | | | | | | | | | |
| *T*(1) | 0.00835(19) | | 0.00890(19) | | 0.00844(19) | | –0.00018(12) | | 0.00187(13) | | –0.00076(12) | | 0.00863(12) | |
| *T*(2) | 0.00725(18) | | 0.00743(19) | | 0.00679(18) | | 0.00039(12) | | 0.00224(13) | | –0.00005(12) | | 0.00708(12) | |
| *M*(1) | 0.0094(3) | | 0.0085(3) | | 0.0072(3) | | 0 | | 0.0028(2) | | 0 | | 0.0083(2) | |
| *M*(2) | 0.0049(3) | | 0.0048(3) | | 0.0045(3) | | 0 | | 0.0016(2) | | 0 | | 0.0047(2) | |
| *M*(3) | 0.0081(5) | | 0.0076(5) | | 0.0064(5) | | 0 | | 0.0019(3) | | 0 | | 0.0074(3) | |
| *M*(4) | 0.0115(2) | | 0.0093(2) | | 0.0101(2) | | 0 | | 0.00462(14) | | 0 | | 0.00995(14) | |
| *A*(2) |  | |  | |  | |  | |  | |  | | 0.0294(17) | |
| *A*(*m*) |  | |  | |  | |  | |  | |  | | 0.025(2) | |
| O(1) | 0.0089(4) | | 0.0135(5) | | 0.0079(4) | | –0.0013(3) | | 0.0026(4) | | –0.00243(4) | | 0.0100(2) | |
| O(2) | 0.0079(4) | | 0.0097(4) | | 0.0093(4) | | 0.0005(3) | | 0.0013(3) | | 0.00012(3) | | 0.0092(2) | |
| O(3) | 0.0102(7) | | 0.0101(6) | | 0.0103(6) | | 0 | | 0.0026(5) | | 0 | | 0.0102(4) | |
| O(4) | 0.0137(5) | | 0.0089(4) | | 0.0109(4) | | 0.0004(3) | | 0.0061(4) | | –0.0004(4) | | 0.0106(2) | |
| O(5) | 0.0102(5) | | 0.0125(5) | | 0.0099(4) | | 0.0035(4) | | 0.0012(4) | | –0.0005(3) | | 0.0111(2) | |
| O(6) | 0.0099(5) | | 0.0138(5) | | 0.0122(5) | | –0.0037(4) | | 0.0027(4) | | 0.0010(4) | | 0.0120(2) | |
| O(7) | 0.0127(7) | | 0.0134(7) | | 0.0171(7) | | 0 | | 0.0046(6) | | 0 | | 0.0143(3) | |