

## Index of substances for Volume III/27I4

The Index of substances consists of two parts:

- A) Alphabetical index of element systems
- B) Alphabetical index of mineral names

### 1. Arrangement for A):

The substances are arranged alphabetically according to their "element system", i.e. the system of their alphabetically ordered elements, without consideration of the number of each element (first column of the Index).

Examples:

CaFe<sub>1-x</sub>Mg<sub>x</sub>Si<sub>2</sub>O<sub>6</sub> is listed under Ca-Fe-Mg-O -Si  
 Na<sub>2</sub>LiFeSi<sub>6</sub>O<sub>15</sub> under Fe-Li-Na-O -Si  
 Ca<sub>5</sub>Si<sub>6</sub>O<sub>17</sub>·5H<sub>2</sub>O under Ca-H -O -Si  
 SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>-FeO-MgO-CaO-Na<sub>2</sub>O-TiO<sub>2</sub> under Al-Ca-Fe-Mg-Na-O -Si-Ti  
 CaMgSi<sub>2</sub>O<sub>6</sub>·Cr under Ca-Cr-Mg-O -Si  
 □Fe<sup>2+</sup><sub>5</sub>Al<sub>2</sub>Si<sub>6</sub>Al<sub>2</sub>O<sub>22</sub>(OH)<sub>2</sub> under Al-Fe -H -O -Si

Within one "element system", the compounds are arranged firstly alphabetically according to the chemical formula as given in the text/tables/figures, secondly according to the increasing number of the first (second, third, ..) atom of the chemical formula.

Examples for the arrangement of substances within a special "element system":

System Na-O -Si-Ti	NaTiSi <sub>2</sub> O <sub>6</sub>	System Co-Mg-O -Si	Co <sub>0.448</sub> Mg <sub>1.552</sub> Si <sub>2</sub> O <sub>6</sub>
	Na <sub>2</sub> TiSiO <sub>5</sub>		Co <sub>0.74</sub> Mg <sub>1.26</sub> Si <sub>2</sub> O <sub>6</sub>
	Na <sub>2</sub> TiSi <sub>4</sub> O <sub>11</sub>		Mg <sub>0.776</sub> Co <sub>0.224</sub> SiO <sub>3</sub>
	Na <sub>4</sub> Ti <sub>4</sub> [Si <sub>2</sub> O <sub>6</sub> ] <sub>2</sub> O <sub>6</sub>		(Mg,Co)SiO <sub>3</sub>

In doubt the reader is recommended to check all compounds belonging to the respective "element system". The user is advised to look also for the name of compound in the "Alphabetical index of mineral names", as in many cases only the formula or the name of a special substance is given in the data part.

The chemical formulae of the substances are generally given as listed in the respective text, tables and figures, or in one of the different formulations used in text, tables and figures (second column).

In some cases more general formulations were used for groups of substances like e.g. A<sub>n</sub>MSi<sub>6</sub>O<sub>15</sub>·xH<sub>2</sub>O, AeDi, M<sub>2</sub>M<sub>1</sub>T<sub>2</sub>O<sub>6</sub> or Ca<sub>3</sub>(Y,R)<sub>4</sub>B<sub>4</sub>Si<sub>6</sub>O<sub>27</sub>·3H<sub>2</sub>O). These formulations were sometimes also considered in the Index (under the systems A -H -M -O -Si, Ae-Di, M -O -T, or B -Ca-H -O -R -Si-Y), and the meaning of the A, M, Ae, Di, T or R was added where possible.

Column 3 gives the page number on which data of the individual substances can be found.

### 2. Arrangement for B):

This index contains in alphabetical order only those mineral names of silicates which are explicitly mentioned in a complete or abbreviated form in the text, tables or figures (first column of index). Besides the "basic" mineral names (e.g. "taramite") there are also listed names with various prefixes (like "ferritaramite", "aluminotaramite", etc.). The page numbers are given in the second column.

## A) Alphabetical index of element systems

Element system	Chemical formula	Page
<b>A -B -C -Cl-F -H -O -T</b>	$A_{1-x}B_2C_5T_8O_{22}(OH,F,Cl,O)_2$ (A = Na, K; B = $Na^+$ , $Li^+$ , $Ca^{2+}$ , $Mg^{2+}$ , $Fe^{2+}$ ; $Mn^{2+}$ ; C = $Mn^{2+}$ , $Fe^{2+}$ , $Mg^{2+}$ , $Fe^{3+}$ , $Cr^{3+}$ , $Al^{3+}$ , $Ti^{4+}$ , $Li^+$ ; T = Si, Al)	220
<b>A -B -C -D -H -O -T -X</b>	$A_2BC_7D_2T_8O_{26}(OH)_4X_{0...1}$ (A = K, Rb, Cs, Na, $H_3O$ , $H_2O$ or $\square$ ; B = Na or Ca; C = Mn, $Fe^{2+}$ , $Fe^{3+}$ , Na, Mg or Zn; D = Ti, Nb or Zr; T = Si or Al; X = F, OH, O or $\square$ )	453
<b>A -B -C -H -O -T</b>	$AB_2^{[6]}C_5^{[4]}T_8O_{22}(OH)_2$ (A = Na, K; B = $Na^+$ , $Li^+$ , $Ca^{2+}$ , $Mg^{2+}$ , $Fe^{2+}$ ; $Mn^{2+}$ ; C = $Mn^{2+}$ , $Fe^{2+}$ , $Mg^{2+}$ , $Fe^{3+}$ , $Cr^{3+}$ , $Al^{3+}$ , $Ti^{4+}$ , $Li^+$ ; T = Si, Al)	220
<b>A -Cr-O -Si</b>	$ACrSi_2O_6$ (A = Li, Na)	51
<b>A -H -M -O -Si</b>	$A_nMSi_6O_{15} \cdot xH_2O$ (A = Na, K, Li, Cs; M = Nd, Ce, Y, Zr, Ti, Sn)	371, 375, 376
	$A_nMSi_6O_{15} \cdot xH_2O$ (M = Nd, Ce, Zr, Ti)	388
<b>A -M -O -Si</b>	$AM^{3+}Si_2O_6$ (A = Na, Li; M = Ti, V, Cr)	51
	$AMSi_2O_6$ (A = Li, Na, M = Sc, V)	174
	$A_nMSi_6O_{15}$ (A = Na, K, Li, Cs; M = Nd, Ce, Y, Zr, Ti, Sn)	373
<b>A -Mg-O -S</b>	$AMgSi_2O_6$ (A = Zn, Cr)	83
<b>A -O -Si-Ti</b>	$ATiSi_2O_6$ (A = Li, Na)	41, 50, 51, 147
<b>A -O -Si-V</b>	$AVSi_2O_6$ (A = Li, Na)	51, 70, 175
<b>Ae-Di</b>	$Ac_{81}Di_{19}$ (Ac: Acmite, Di: Diopside)	49, 109, 155
<b>Ae-Di</b>	$Ae_{0.81}Di_{0.19}$ (Ae: Aegirine, Di: Diopside)	63, 116
	$Ae_{0.99}Di_{0.01}$ (Ae: Aegirine, Di: Diopside)	93
<b>Ae-Di-Hd</b>	$Ae_{0.65}Hd_{0.11}Di_{0.19}Oth_{0.05}$ (Ae: Aegirine, Hd: Hedenbergite, Di: Diopside, Oth: others)	93, 109
	$Ae_{0.70}Hd_{0.14}Di_{0.16}$ (Ae: Aegirine, Hd: Hedenbergite, Di: Diopside)	93
<b>Ae-Di-Hd-Jd</b>	$Di_{0.42}Jd_{0.38}Hd_{0.10}Ae_{0.10}$ (Di: Diopside, Jd: Jadeite, Hd: Hedenbergite, Ae: Aegirine)	35
<b>Ae-Hd</b>	$Hd_xAe_{1-x}$	117
<b>Ae-Hd-Ko</b>	$Hd_{0.08}Ae_{0.15}Ko_{0.77}$	117
	$Hd_{0.50}Ae_{0.27}Ko_{0.24}$	117
<b>Al-As-Ca-Fe-H -Mn-O -Si</b>	$(Ca_{0.76}Mn_{0.19})(Mn^{3+}_{5.97}Fe^{3+}_{0.05})(Si_{2.80}Al_{0.16}As^{5+}_{0.07})O_{16} \cdot 7.01H_2O$	405
<b>Al-B -Be-Ca-Ce-Dy-Er-Eu-F -Fe-Gd-La-Li-Mg-Mn-Nd-O -Pr-Si-Sm-Th-Ti-U -Y -Yb</b>	$(Ca_{8.21}Th_{0.77}U_{0.11}Y_{0.25}La_{0.59}Ce_{1.30}Pr_{0.15}Nd_{0.46}Sm_{0.06}Eu_{0.01}Gd_{0.04}Dy_{0.03}Er_{0.01}Yb_{0.01})(Ti_{0.41}Al_{0.83}Fe^{3+}_{0.65}Mn^{3+}_{0.02}Mg_{0.13})(Si_{8.11}B_{7.98}Be_{0.98}Li_{0.49})$ on the basis of 48 (O+F)	466
<b>Al-B -Be-Ca-Ce-O -Si</b>	$Ca_4(CeCa)AlBe_2[Si_4B_4O_{22}]O_2$	459

Element system	Chemical formula	Page
<b>Al-B -Be-Ca-F -Fe-H -Li-Mg-Mn-O -R -Si-Th-Ti-U -Y</b>	$M_{3,4}Ca_4^{M2}[R_{0.72}(Th,U)^{4+}_{0.66}Ca_{0.60}Y_{0.02}]^{M1}(Al_{0.48}Fe^{3+}_{0.38}Ti^{4+}_{0.10}Mg_{0.05}Mn^{3+}_{0.02})^{T}(Be_{0.82}\square_{0.60}Li_{0.04})B_{4.00}Si_{4.00}O_{22}^{O5}(O^{2-}_{0.97}OH_{0.54}F_{0.49})$ (R = rare earth element)	466
<b>Al-B -Be-Ca-F -Fe-H -Li-Mg-O -R -Si-Th-Ti-U -Y</b>	$M_{3,4}Ca_4^{M2}[R_{1.45}Ca_{0.37}(Th,U)^{4+}_{0.17}Y_{0.01}]^{M1}(Al_{0.50}Fe^{3+}_{0.38}Mg_{0.03}Ti^{4+}_{0.07})^{T}(Be_{1.18}Li_{0.02}\square_{0.37})^{B_{3.99}Si_{3.98}O_{22}^{O5}(O^{2-}_{1.04}F_{0.53}OH_{0.43})}$ (R = rare earth element)	466
<b>Al-B -Be-Ca-O -R -Si</b>	$M_{3,4}Ca_4^{M2}(R^{3+}Ca)^{M1}Al^TBe_2Si_4B_4O_{22}^{O5}O_2$ ( $R^{3+} = Y+R$ ; R = rare earth element)	452
<b>Al-B -Ca-Ce-Fe-La-Nd-O -Si-Ti</b>	$Ca_6(Ce,Nd,La,\square)_4(Ti,Fe,Al)_2Si_8B_8O_{44}$	452
<b>Al-B -Ca-Ce-H -O -R -Si</b>	$(Ca_3R)Ce_2Al\square_2[Si_4B_4O_{22}](OH)_2$ (R = rare earth element)	459
<b>Al-B -Ca-F -H -O -R -Si-Th-U</b>	$M_{3,4}Ca_4^{M2}[(Th,U)R]^{M1}Al^T\square_2Si_4B_4O_{22}^{O5}(OH,F)_2$ (R = rare earth element)	452
<b>Al-B -Ca-Fe-H -Mg-Mn-O -R -Si-Th-Ti</b>	$(Ca_{0.78}R_{1.06}Mn_{0.02}Mg_{0.06}Ti_{0.02}Th_{0.02})(Si_{1.70}Al_{0.19}Fe_{0.15}B_{1.13})O_8 \cdot 0.78H_2O$ (R = rare earth element)	466
<b>Al-B -Ca-Fe-H -Mn-O -R -Si</b>	$(Ca_{1.02}R_{0.93}Mn_{0.05})(Si_{1.61}Al_{0.23}Fe_{0.18}B_{0.98})O_8 \cdot xH_2O$ (R = rare earth element)	466
<b>Al-B -Ca-Fe-H -Mn-O -R -Si-Th</b>	$(Ca_{0.64}R_{1.30}Mn_{0.03}Th_{0.01})(Si_{1.56}Al_{0.35}Fe_{0.11}B_{0.97})O_8 \cdot 1.13H_2O$ (R = rare earth element)	466
<b>Al-B -Ca-Fe-H -Mn-O -R -Si-Y</b>	$(Ca_{5.10}Mn_{0.18}Y_{3.00}R_{1.56}\square_{2.16})(Al_{1.12}Fe^{3+}_{0.89})(OH)_4^{[Si_8B_8O_{38.26}(OH)_{5.74}]}$ (R = rare earth element)	466
<b>Al-B -Ca-Fe-H -O -R -Si</b>	$M_{2,3,4}[Ca_{5.5}R_{5.0}\square_{1.5}]^{M1}(Al_{1.1}Fe^{3+}_{0.9})(OH)_4^{[Si_8B_8O_{40}(OH)_4]}$ (R = rare earth element)	451
<b>Al-B -Ca-Fe-Mg-Na-O -Si-Ti</b>	$SiO_2 - 20.85; Al_2O_3 - 40.20; FeO(\text{total iron}) - 3.48; MgO - 12.71; CaO - 17.11; Na_2O - 0.02; TiO_2 - 0.06$ ( $B_2O_3$ not determined)	341
<b>Al-B -Ca-H -O -R -Si-Th-U</b>	$Ca_4[(Th,U)R]Al\square_2[Si_4B_4O_{22}](OH)_2$ (R = rare earth element)	459
<b>Al-B -Ca-H -O -R -Si-Y</b>	$(Ca_3R)Y_2Al\square_2[Si_4B_4O_{22}](OH)_2$ (R = rare earth element)	459
<b>Al-B -Ca-Mg-O -Si</b>	$Ca_2(Mg,Al)_6(Si,Al,B)_6O_{20}$	335
<b>Al-Ba-Be-Ca-Fe-H -Mg-Mn-O -Pb-Si</b>	$(Pb_{0.6}Ca_{0.6}Ba_{0.1}Mn_{0.8})Ca_{4.0}Fe^{3+}_{2.0}(Mg_{6.3}Fe^{3+}_{1.4}Fe^{2+}_{0.8}Al_{0.3})(Si_{13.8}Be_{0.1})(OH)_{14.9}O_{39.7}$	45, 95, 124
<b>Al-Ba-Ca-Ce-F -Fe-H -K -Mg-Mn-Na-Nb-O -Rb-Si-Sr-Ti</b>	$(K_{1.67}Rb_{0.07}Sr_{0.03}Ba_{0.01}Na_{0.02})(Na_{0.65}Ca_{0.33})^{(Mn_{5.15}Na_{0.44}Mg_{0.64}Fe^{2+}_{0.77}Ce_{0.01})(Ti_{1.90}Nb_{0.08})^{(Si_{8.03}Al_{0.06})O_{26}(OH)_{4.20}F_{0.81}}}$	466
	$(K_{1.77}Rb_{0.07}Sr_{0.03}Ba_{0.05})(Na_{0.52}Ca_{0.31})^{(Na_{0.38}Mg_{0.47}Mn_{4.07}Fe^{2+}_{2.06}Ce_{0.02})(Ti_{1.78}Nb_{0.24})^{(Si_{7.76}Al_{0.28})O_{26}(OH)_{4.23}F_{0.78}}}$	466
<b>Al-Ba-Ca-Cl-F -Fe-H -K -Mn-Na-Nb-O -Rb-Si-Sr-Ta-Ti-Zr</b>	$(Ca_{22.60}K_{12.32}Na_{10.08}Sr_{1.80}Ba_{1.28}Rb_{0.16})^{(Ti_{5.56}Nb_{3.36}Mn_{0.96}Fe^{2+}_{0.84}Fe^{3+}_{0.20}Zr_{0.20}Ta_{0.08})^{(Si_{47.5}Al_{0.44})[O_{139.36}(OH)_{20.64}F_{9.76}Cl_{0.80}]}}$	466

Element system	Chemical formula	Page
<b>Al-Ba-Ca-Cl-F -Fe-H -K -Mn-Na-O -Si-Sr-Ti</b>	$(\text{Na}_{3.48}\text{K}_{3.67}\text{Ba}_{1.58})(\text{Ca}_{9.47}\text{Sr}_{1.59})(\text{Ti}_{3.88}\text{Mn}_{0.11}\text{Fe}_{0.26})\text{Si}_{17.96}\text{Al}_{0.04}\text{O}_{60.39}\text{F}_{4.51}\text{Cl}_{0.63}\cdot n\text{H}_2\text{O}$	382
<b>Al-Ba-Ca-F -Fe-H -K -Mg-Mn-Na-Nb-O -R -Si-Sr-Ta-Ti-Zr</b>	$(\text{Na}_{3.36}\text{K}_{1.62})(\text{Ba}_{2.11}\text{Ca}_{1.73}\text{R}_{0.09}\text{Sr}_{0.02})(\text{Fe}^{2+}_{8.77}\text{Mn}^{2+}_{6.02}\text{Mg}_{0.23})(\text{Ti}_{6.57}\text{Nb}_{0.26}\text{Zr}_{0.18}\text{Al}_{0.12}\text{Ta}_{0.01})\text{O}_{64.17}(\text{F}_{4.62}\text{OH}_{1.21})$ (R = rare earth element)	466
<b>Al-Ba-Ca-F -Fe-H -K -Mg-Mn-Na-Nb-O -Si-Ta-Ti</b>	$(\text{K}_{0.31}\text{Ba}_{0.02})(\text{H}_3\text{O})^{+}_{1.67}[\text{Na}_{0.20}\text{Ca}_{0.51}(\text{H}_3\text{O})^{+}_{0.29}]\text{Fe}^{3+}_{3.48}\text{Mn}^{4+}_{0.44}\text{Mn}^{2+}_{1.30}\text{Mg}_{0.14}(\text{Ti}_{1.38}\text{Nb}_{0.43}\text{Ta}_{0.04})(\text{Si}_{4.92}\text{Al}_{0.88}\text{O}_{17.40})(\text{OH})_{6.80}(\text{O}_{2.61}(\text{OH})_{3.29}\text{F}_{1.10})$	466
<b>Al-Ba-Ca-F -Fe-H -K -Mg-Mn-Na-Nb-O -Si-Ti-Zr</b>	$(\text{Na}_{0.880}\text{K}_{1.353}\text{Ca}_{0.572}\text{Ba}_{0.013})\text{Fe}_{1.647}\text{Mg}_{0.727}\text{Mn}_{4.602}\text{Ti}_{1.808}\text{Nb}_{0.150}\text{Zr}_{0.061}(\text{Si}_{7.012}\text{Al}_{0.335})\text{O}_{25.131}\text{F}_{0.409}(\text{OH})_{5.460}$	466
	$\text{Na}_2(\text{K}_{3.95}\text{Ba}_{0.01}\text{Na}_{0.04})(\text{Fe}^{2+}_{1.52}\text{Fe}^{3+}_{0.48})(\text{Fe}^{2+}_{2.00}\text{Mn}_{1.04}\text{Ca}_{0.76}\text{Na}_{0.20})(\text{Fe}^{2+}_{6.76}\text{Mg}_{1.24})(\text{Ti}_{3.95}\text{Nb}_{0.03}\text{Zr}_{0.02})(\text{F}_{1.20}\text{OH}_{0.80})[(\text{Si}_{15.70}\text{Al}_{0.30})\text{O}_{48}]\text{O}_4(\text{OH})_8$	466
<b>Al-Ba-Ca-F -Fe-H -K -Mg-Mn-Na-O -R -Si-Sr-Zr</b>	$(\text{Na}_{4.06}\text{K}_{0.07})(\text{Ca}_{7.30}\text{R}_{0.47})(\text{Mn,Fe,Sr,Ba,Mg,Zr})_{0.14}\text{Si}_{15.61}\text{Al}_{0.03}\text{O}_{39.70}(\text{F}_{3.73}\text{OH}_{0.71})$ (R = rare earth element)	433
<b>Al-Ba-Ca-Fe-H -K -Li-Mg-Na-O -Si</b>	$(\text{Ba}_{0.88}\text{K}_{0.07}\text{Na}_{0.06}\text{Ca}_{0.03})(\text{Mg}_{1.69}\text{Al}_{0.17}\text{Fe}^{2+}_{0.06}\text{Fe}^{3+}_{0.03})\text{Li}_{0.95}\text{Al}_{3.00}(\text{Si}_{3.93}\text{Al}_{0.07})\text{O}_{11.96}(\text{OH})_{8.07}$	213
<b>Al-Ba-Ca-Fe-H -K -Mg-Mn-Na-Nb-O -Si-Ti</b>	$(\text{K}_{0.43}\text{Na}_{0.29}\text{Ba}_{0.16}\text{Ca}_{0.06}\text{Mn}_{0.09})(\text{Ti}_{0.89}\text{Nb}_{0.03}\text{Fe}_{0.05}\text{Mg}_{0.03})[\text{Si}_{1.83}\text{Al}_{0.07}\text{O}_{5.79}(\text{OH})_{1.21}]\cdot 0.6\text{H}_2\text{O}$	341
	$\text{SiO}_2 - 39.59; \text{Al}_2\text{O}_3 - 1.30; \text{Fe}_2\text{O}_3 - 1.56; \text{Nb}_2\text{O}_5 - 1.45; \text{TiO}_2 - 25.49; \text{MgO} - 0.42; \text{MnO} - 2.34; \text{CaO} - 1.19; \text{BaO} - 6.61; \text{K}_2\text{O} - 7.23; \text{K}_2\text{O} - 7.23; \text{Na}_2\text{O} - 3.18; \text{H}_2\text{O} - 7.91$	341
<b>Al-Ba-Ca-Fe-H -K -Na-O -Si-Ti-Zr</b>	$(\text{Na}_{0.84}\text{K}_{1.16})(\text{Ba}_{0.55}\text{K}_{0.20}\text{Ca}_{0.18})\text{Ti}_{1.55}\text{Fe}_{0.18}\text{Zr}_{0.04}\text{Al}_{0.01}\text{Si}_{0.21}\text{Si}_{4.0}(\text{O}_{13.39}\text{OH}_{0.61})$	405
<b>Al-Ba-Cl-K -Na-Nb-O -Si-Ti-Zr</b>	$\text{Na}_{3.00}(\text{K}_{5.23}\text{Na}_{0.57}\text{Ba}_{0.08})(\text{Ti}_{1.95}\text{Nb}_{0.04}\text{Zr}_{0.01})\text{Al}_{2.03}\text{Si}_{7.98}\text{O}_{26.10}\text{Cl}_{2.90}$	434
<b>Al-Ba-F -Fe-K -Mg-O -Sc-Si</b>	$\text{KBa}(\text{Al,Sc})(\text{Mg,Fe}^{2+})_6\text{Si}_6\text{O}_{20}\text{F}_2$	335, 341
<b>Al-Ba-F -H -Li-Mg-O -Si</b>	$\text{LiBaMg}_2\text{Al}_3(\text{Si}_2\text{O}_6)_2(\text{OH})_4\text{F}_4$	212
<b>Al-Ba-H -Li-Mg-O -Si</b>	$\text{BaMg}_2\text{LiAl}_3(\text{Si}_2\text{O}_6)_2(\text{OH})_8$	209
<b>Al-Be-Ca-Fe-Mg-Na-O -Si-Ti</b>	$(\text{Ca,Na})_4[(\text{Fe,Mg})_7(\text{Fe}^{3+}_3\text{Ti})]\text{Si}_9\text{Be}_2\text{AlO}_{40}$	335
	$(\text{Ca}_{1.75}\text{Na}_{0.25})(\text{Fe}^{2+}_{3.80}\text{Fe}^{3+}_{1.35}\text{Ti}^{4+}_{0.06}\text{Mg}^{2+}_{0.85})\text{O}_2(\text{Si}_{4.4}\text{Al}_{0.6}\text{Be}_{1.0})\text{O}_{18}$	340
<b>Al-Be-Ca-H -O -Si</b>	$\text{Ca}_4(\text{Al,Be})_4\text{Si}_9\text{O}_{26}(\text{OH})_2$	456, 459
	$\text{Ca}_4(\text{BeOH})_{2+x}\text{Al}_{2-x}\text{Si}_9\text{O}_{26-x}$	466
<b>Al-Be-Fe-H -K -Mg-Na-Nb-O -Si-Ti</b>	$(\text{Na}_{2.293}\text{K}_{0.169})(\text{Ti}_{3.386}\text{Fe}_{0.471}\text{Nb}_{0.034}\text{Mg}_{0.029})\text{Si}_{6.626}\text{Al}_{1.098}\text{Be}_{0.276}\text{O}_{22}(\text{OH})_4(\text{H}_2\text{O})_{1.12}$	95, 124
<b>Al-C -Ca-Cl-F -Fe-H -K -Mg-Mn-Na-O -P -Si-Ti</b>	$\text{SiO}_2 - 56.08; \text{TiO}_2 - 0.10; \text{Al}_2\text{O}_3 - 0.55; \text{Fe}_2\text{O}_3 - 1.41; \text{FeO} - 0.71; \text{MgO} - 0.05; \text{MnO} - 0.38; \text{CaO} - 20.95; \text{Na}_2\text{O} - 8.01; \text{K}_2\text{O} - 8.47; \text{H}_2\text{O} - 0.49; \text{H}_2\text{O}^+ - 1.11; \text{F} - 2.21; \text{Cl} - 0.22; \text{CO}_2 - 0.20; \text{P}_2\text{O}_5 - 0.04$	434

Element system	Chemical formula	Page
<b>Al-C -Ca-Cl-F -Fe-H -K -Mg-Mn-Na-O -Si-Ti</b>	$\text{SiO}_2 - 51.85; \text{TiO}_2 - 0.15; \text{Al}_2\text{O}_3 - 0.56; \text{Fe}_2\text{O}_3 - 12.26; \text{FeO} - 4.52; \text{MgO} - 0.60; \text{MnO} - 7.91; \text{CaO} - 19.00; \text{Na}_2\text{O} - 0.25; \text{K}_2\text{O} - 0.09; \text{H}_2\text{O}^+ - 1.95; \text{H}_2\text{O}^- - 0.26; \text{F} - 0.1 \text{ Cl} - 0.06; \text{CO}_2 - 0.13$	405
<b>Al-C -Ca-Fe-H -K -Mg-Mn-Na-O -P -Si</b>	$(\text{Ca}_{4.04}\text{Na}_{0.16}\text{K}_{0.02})(\text{Fe}^{2+}_{0.91}\text{Mn}_{0.03}\text{Mg}_{1.47})-(\text{Al}_{6.36}\text{Fe}^{3+}_{1.72})(\text{Si}_{11.59}\text{P}_{0.19})\text{O}_{36.21}(\text{OH})_{12.11}-(\text{CO}_2)_{0.99} \cdot 12.11\text{H}_2\text{O}$	124
<b>Al-C -Ca-Fe-H -Mg-O -Si</b>	$\text{Ca}_4(\text{Al},\text{Fe},\text{Mg})_{10}\text{Si}_{12}\text{O}_{36}(\text{OH})_{12}\text{CO}_3 \cdot \text{H}_2\text{O}$ $\text{Ca}_4(\text{Al},\text{Fe},\text{Mg})_{10}\text{Si}_{12}\text{O}_{36}(\text{OH})_{12}\text{CO}_3 \cdot 12\text{H}_2\text{O}$	45, 95 84
<b>Al-C -Ca-H -O -R -Si-Y</b>	$\text{Y}_{2.05}\text{Ca}_{1.47}\text{R}_{0.35}\text{Si}_{3.95}\text{Al}_{0.09}\text{O}_{10.19}(\text{CO}_3)_{2.94} \cdot 3.93\text{H}_2\text{O}$ (R = rare-earth element)	434
<b>Al-Ca-Cl-Cr-F -Fe-H -K -Mg-Mn-Na-Ni-O -Si-Ti</b>	$\text{Na}_{0.023}\text{K}_{0.002}\text{Na}_{0.007}\text{Ca}_{0.097}\text{Ni}_{0.011}\text{Mn}_{0.041}\text{Mg}_{5.299}-\text{Fe}_{1.454}\text{Cr}_{0.021}\text{Ti}_{0.003}\text{Al}_{0.067}(\text{Si}_{7.888}\text{Al}_{0.112})\text{O}_{22}-\text{OH}_{1.995}\text{Cl}_{0.002}\text{F}_{0.013}$	269, 283
<b>Al-Ca-Cl-Cr-F -H -K -Mg-Na-O -Si-Ti</b>	$(\text{K}_{0.199}\text{Na}_{0.804})(\text{Mg}_{0.240}\text{Ca}_{1.675}\text{Na}_{0.085})(\text{Al}_{0.677}-\text{Ti}_{0.428}\text{Cr}_{0.003}\text{Mg}_{3.892})(\text{Si}_{6.168}\text{Al}_{1.832})\text{O}_{22}(\text{OH})_{1.356}-\text{F}_{0.014}\text{Cl}_{0.008}\text{O}^{2-}_{0.622}$	265, 271
<b>Al-Ca-Cl-F -Fe-H -K -Mg-Na-O -Si-Ti</b>	$\text{Na}_{0.67}\text{K}_{0.17}\text{Ca}_{1.99}\text{Mg}_{3.62}\text{Fe}_{0.07}\text{Ti}_{0.27}\text{Al}_{1.12}\text{Si}_{5.75}-\text{Al}_{2.25}\text{O}_{22}\text{F}_{0.58}\text{Cl}_{0.02}(\text{OH})_{1.05}$	270, 284
<b>Al-Ca-Cl-F -Fe-H -Mg-Mn-Na-O -Si-Ti</b>	$(\text{Na}_{1.84}\text{Ca}_{0.20})(\text{Mg}_{2.38}\text{Fe}^{2+}_{0.70}\text{Fe}^{3+}_{0.30}\text{Al}_{1.58}\text{Ti}_{0.06}-\text{Mn}_{0.01})(\text{Si}_{7.92}\text{Al}_{0.08})(\text{O}^{2-}, \text{OH}^{2-}, \text{F}^-, \text{Cl}^-)_{24}$	271
<b>Al-Ca-Cl-F -H -K -Mg-Na-O -Si</b>	$\text{Na}_{0.383}\text{K}_{0.119}\text{Ca}_{1.802}\text{Mg}_{5.0}(\text{Si}_{7.767}\text{Al}_{0.228})\text{O}_{22}\text{F}_{0.660}-\text{Cl}_{0.012}(\text{OH})_{1.337}$	270
<b>Al-Ca-Cl-F -H -K -Mg-Na-O -Si-Ti</b>	$(\text{K}_{0.215}\text{Na}_{0.807})(\text{Na}_{0.094}\text{Ca}_{1.789}\text{Mg}_{0.116})-(\text{Al}_{0.471}\text{Ti}_{0.673}\text{Mg}_{3.856})(\text{Si}_{5.860}\text{Al}_{2.140})\text{O}_{22}(\text{OH})_{1.378}-\text{F}_{0.014}\text{Cl}_{0.003}-\text{O}^{2-}_{0.605}$	271
<b>Al-Ca-Co-Fe-H -Mg-Mn-Na-Ni-O -Si</b>	$(\text{Ca}_{0.87}\text{Na}_{0.03})(\text{Mn}^{2+}_{3.94}\text{Mg}_{0.05}\text{Fe}^{2+}_{0.01}\text{Ni}_{0.01}\text{Co}_{0.01})-(\text{Si}_{5.04}\text{Al}_{0.02})\text{O}_{14.03}(\text{OH})_{0.97}[(\text{OH}) \cdot \text{H}_2\text{O}]$	405
<b>Al-Ca-Cr-F -Fe-H -K -Li-Mg-Mn-Na-O -Si-Zn</b>	$^{\text{A}}(\text{Na}_{0.64}\text{K}_{0.01})^{\text{B}}(\text{Li}_{1.93}\text{Ca}_{0.04}\text{Na}_{0.03})^{\text{M1}}(\text{Mg}_{1.69}-\text{Fe}^{2+}_{0.31})^{\text{M2}}(\text{Al}_{1.98}\text{Cr}_{0.01}\text{Zn}_{0.01})^{\text{M3}}(\text{Li}_{0.64}\text{Fe}^{2+}_{0.21}-\text{Mg}_{0.13}\text{Mn}_{0.02})^{\text{T1}}(\text{Si}_{3.96}\text{Al}_{0.04})^{\text{T2}}\text{Si}_4\text{O}_{22}^{\text{x}}(\text{F}_{1.10}\text{OH}_{0.90})$	272
<b>Al-Ca-Cr-F -Fe-H -K -Mg-Mn-Na-O -Si-Ti-Zn</b>	$(\text{Ca}_{1.787}\square_{0.207})(\text{Na}_{0.283}\text{K}_{0.128})(\text{Al}_{0.250}\text{Ti}_{0.154}\text{Cr}^{3+}_{0.001}-\text{Fe}^{3+}_{0.133}\text{Fe}^{2+}_{1.536}\text{Mn}^{2+}_{0.021}\text{Mg}_{3.109}\text{Zn}_{0.004})-(\text{Si}_{6.923}\text{Al}_{1.077})\text{O}_{22}(\text{OH})_{1.953}\text{F}_{0.047}$	270, 271
	$(\text{Ca}_{1.825}\text{Na}_{0.019}\square_{0.156})(\text{Na}_{0.462}\text{K}_{0.099})(\text{Al}_{0.303}\text{Ti}_{0.325}-\text{Cr}^{3+}_{0.003}\text{Fe}^{3+}_{0.200}\text{Fe}^{2+}_{1.245}\text{Mn}^{2+}_{0.020}\text{Mg}_{3.058}\text{Zn}_{0.002})-(\text{Si}_{6.307}\text{Al}_{1.693})\text{O}_{22}(\text{OH})_{1.958}\text{F}_{0.042}$	270
	$(\text{Ca}_{1.846}\text{Na}_{0.048}\square_{0.106})(\text{Na}_{0.378}\text{K}_{0.100})(\text{Al}_{0.354}\text{Ti}_{0.210}-\text{Cr}^{3+}_{0.001}\text{Fe}^{3+}_{0.308}\text{Fe}^{2+}_{1.228}\text{Mn}^{2+}_{0.020}\text{Mg}_{2.982}\text{Na}_{0.002}-\text{Zn}_{0.001})(\text{Si}_{6.488}\text{Al}_{1.512})\text{O}_{22}(\text{OH})_{1.958}\text{F}_{0.042}$	270
<b>Al-Ca-Cr-F -Fe-H -Mg-Mn-Na-O -Si-Ti</b>	$(\text{Ca}_{0.875}\text{Na}_{0.04}\text{Mn}_{0.08})_2(\text{Fe}^{2+}_{0.506}\text{Fe}^{3+}_{0.06}\text{Mg}_{0.375}-\text{Mn}_{0.044}\text{Al}_{0.014}\text{Ti}_{0.002}\text{Cr}_{0.002})_5(\text{Si}_{0.955}\text{Al}_{0.045})_8\text{O}_{22}-(\text{OH})_{1.97}\text{F}_{0.03}$	265, 270, 284
<b>Al-Ca-Cr-F -Mg-Na-O -Si</b>	$\text{NaCa}_2\text{Mg}_4\text{CrSi}_6\text{Al}_2\text{O}_{22}\text{F}_2$	267

Element system	Chemical formula	Page
<b>Al-Ca-Cr-Fe-H -K -Li-Mg-Mn-Na-O -Si-Ti</b>	$(\text{Ca}_{0.042}\text{Na}_{0.544}\text{K}_{0.007})(\text{Al}_{1.365}\text{Mg}_{3.009}\text{Fe}^{2+}_{2.351}\text{Fe}^{3+}_{0.140}\text{Mn}_{0.031}\text{Ti}_{0.026}\text{Li}_{0.018}\text{Cr}_{0.002})(\text{Si}_{5.953}\text{Al}_{2.047})\text{O}_{22}(\text{OH})_2$	269
<b>Al-Ca-Cr-Fe-H -K -Mg-Mn-Na-Ni-O -Si-Ti-Zn</b>	$(\text{Ca}_{1.660}\text{Na}_{0.058}\square_{0.282})(\text{Na}_{0.095}\text{K}_{0.040})(\text{Al}_{0.217}\text{Ti}_{0.001}\text{Cr}^{3+}_{0.002}\text{Fe}^{3+}_{0.302}\text{Fe}^{2+}_{1.103}\text{Mn}^{2+}_{0.027}\text{Mg}_{3.626}\text{Ni}_{0.002}\text{Zn}_{0.002})(\text{Si}_{7.392}\text{Al}_{0.608})\text{O}_{22}(\text{OH})$	270
<b>Al-Ca-Cr-Fe-H -K -Mg-Mn-Na-O -Si</b>	$(\text{K}_{0.003}\text{Na}_{0.058})(\text{Ca}_{1.886}\text{Na}_{0.089}\text{Mn}_{0.025})(\text{Fe}^{2+}_{0.287}\text{Mg}_{4.749}\text{Cr}^{3+}_{0.009})(\text{Si}_{7.946}\text{Al}_{0.048})\text{O}_{22}(\text{OH})$	313
<b>Al-Ca-Cr-Fe-H -K -Mg-Na-O -Si-Ti</b>	$\text{K}_{0.02}\text{Na}_{0.74}\text{Ca}_{1.98}\text{Fe}^{2+}_{0.02}(\text{Mg}_{4.26}\text{Fe}^{2+}_{0.19}\text{Cr}_{0.18}\text{Ti}_{0.07}\text{Al}_{0.30})(\text{Si}_{6.62}\text{Al}_{1.38})\text{O}_{22}(\text{OH})_2$	265, 272
<b>Al-Ca-Cr-Fe-H -Mg-Mn-Na-Ni-O -Si-Ti</b>	$\text{Na}_{0.021}\text{Ca}_{0.069}\text{Ni}_{0.015}\text{Mn}_{0.014}\text{Mg}_{6.142}\text{Fe}_{0.704}\text{Cr}_{0.016}\text{Ti}_{0.001}\text{Al}_{0.039}(\text{Si}_{7.923}\text{Al}_{0.077})\text{O}_{22}(\text{OH})_{1.992}$	269, 283
<b>Al-Ca-Cr-Fe-H -Mg-Na-O -Si</b>	$\text{Na}_{0.01}(\text{Na}_{1.93}\text{Ca}_{0.05}\text{Fe}_{0.02})(\text{Mg}_{2.60}\text{Fe}^{2+}_{0.41}\text{Fe}^{3+}_{0.15}\text{Cr}_{0.01}\text{Al}_{1.83})(\text{Si}_{7.92}\text{Al}_{0.08})\text{O}_{22}(\text{OH})_2$	311
<b>Al-Ca-Cr-Fe-K -Mg-Mn-Na-O -Si-Ti</b>	$(\text{Ca}_{0.956}\text{Na}_{0.026}\text{K}_{0.0002})(\text{Mg}_{0.928}\text{Fe}_{0.032}\text{Cr}_{0.024}\text{Al}_{0.010}\text{Ti}_{0.0019}\text{Mn}_{0.0014})\text{Si}_2\text{O}_6$	97, 99
<b>Al-Ca-Cr-Fe-Mg-Mn-Na-O -Si-Ti</b>	$\text{Ca}_{0.634}\text{Na}_{0.093}\text{Mg}_{0.885}\text{Ti}_{0.023}\text{Cr}_{0.004}\text{Mn}_{0.005}\text{Fe}^{2+}_{0.134}\text{Fe}^{3+}_{0.048}\text{Al}_{0.350}\text{Si}_{1.822}\text{O}_6$	106
	$\text{Ca}_{0.7596}\text{Na}_{0.1050}\text{Mg}_{0.8513}\text{Mn}_{0.0026}\text{Fe}_{0.0907}\text{Cr}_{0.0275}\text{Ti}_{0.0129}\text{Al}_{0.2833}\text{Si}_{1.8756}\text{O}_6$	97
	$(\text{Ca}_{0.841}\text{Na}_{0.019}\text{Mg}_{0.888}\text{Fe}^{2+}_{0.151}\text{Ti}_{0.011}\text{Al}_{0.028}\text{Cr}_{0.003}\text{Fe}^{3+}_{0.054}\text{Mn}_{0.006})(\text{Si}_{1.914}\text{Al}_{0.086})\text{O}_6$	28
	58.07SiO <sub>2</sub> , 0.03TiO <sub>2</sub> , 0.32Al <sub>2</sub> O <sub>3</sub> , 0.76Cr <sub>2</sub> O <sub>3</sub> , 1.69FeO, 0.05MnO, 15.40MgO, 23.10 CaO, 0.52Na <sub>2</sub> O (in wt%)	80
<b>Al-Ca-Cr-Fe-Mg-Mn-O -Si</b>	$\text{Ca}_{0.003}\text{Mn}_{0.005}\text{Fe}_{0.134}\text{Mg}_{1.857}\text{Cr}_{0.001}\text{Al}_{0.005}\text{Si}_{1.996}\text{O}_6$	106
<b>Al-Ca-Cr-Fe-Mg-Mn-O -Si-Ti</b>	$\text{Ca}_{0.009}\text{Mn}_{0.023}\text{Fe}_{0.941}\text{Mg}_{0.962}\text{Cr}_{0.001}\text{Al}_{0.153}\text{Ti}_{0.004}\text{Si}_{1.913}\text{O}_6$	106
	$\text{Ca}_{0.037}\text{Mn}_{0.023}\text{Fe}_{1.00}\text{Mg}_{0.929}\text{Cr}_{0.001}\text{Al}_{0.024}\text{Ti}_{0.004}\text{Si}_{1.984}\text{O}_6$	106
<b>Al-Ca-Cr-H -Mg-Na-O -Si</b>	$\text{NaCa}_2\text{Mg}_4\text{CrSi}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	267
<b>Al-Ca-Cr-Mg-Na-O -Si-V</b>	$(\text{Na}_{0.92}\text{Ca}_{0.07})(\text{V}_{0.54}\text{Cr}_{0.36}\text{Mg}_{0.07}\text{Al}_{0.03})\text{Si}_{1.99}\text{O}_6$	95, 124
<b>Al-Ca-Cs-F -Fe-H -K -Li-Mn-Na-Nb-O -Si-Ti-Zr</b>	$(\text{Cs}_{1.22}\text{K}_{0.35}\text{Na}_{1.14}\text{Ca}_{0.09})(\text{Mn}_{3.99}\text{Fe}^{2+}_{2.00}\text{Fe}^{3+}_{0.55}\text{Li}_{0.44})(\text{Ti}_{1.49}\text{Nb}_{0.54}\text{Zr}_{0.12})(\text{Si}_{7.92}\text{Al}_{0.15})\text{O}_{24}(\text{O}_{3.69}(\text{OH})_{2.35}\text{F}_{0.96})$	466
<b>Al-Ca-Cu-Fe-H -K -Mg-Mn-Na-Nb-O -Rb-Si-Sr-Ti-Zn-Zr</b>	$(\text{K}_{3.39}\text{Na}_{4.25}\text{Rb}_{0.01})(\text{Ca}_{3.39}\text{Mn}_{0.02}\text{Fe}^{3+}_{0.31}\text{Zn}_{0.10}\text{Cu}_{0.04}\text{Sr}_{0.02}\text{Mg}_{0.17})(\text{Zr}_{7.11}\text{Nb}_{0.28}\text{Ti}_{0.26})(\text{Si}_{39.81}\text{Al}_{0.19})\text{O}_{103.36}\cdot 22.77\text{H}_2\text{O}$	434
<b>Al-Ca-F -Fe-H -K -Li-Mg-Mn-Na-O -Si</b>	$^{\text{A}}(\text{K}_{0.03}\text{Na}_{0.30})^{\text{B}}(\text{Na}_{0.87}\text{Ca}_{0.39}\text{Mn}_{0.68}\text{Li}_{0.06})^{\text{C}}(\text{Mn}_{0.27}\text{Mg}_{4.01}\text{Fe}^{3+}_{0.72})\text{Si}_{7.88}\text{Al}_{0.12}\text{O}_{22}\text{F}_{0.40}(\text{OH})_{1.60}$	238
	$(\text{K}_{0.20}\text{Na}_{0.75})(\text{Na}_{1.92}\text{Ca}_{0.08})(\text{Mg}_{2.32}\text{Fe}^{3+}_{1.31}\text{Mn}^{3+}_{0.42}\text{Al}_{0.14}\text{Li}_{0.81})(\text{Si}_{7.93}\text{Al}_{0.07})\text{O}_{22}(\text{OH})_{1.49}\text{F}_{0.51}$	266, 271, 284
	$(\text{Na}_{0.45}\text{Ca}_{0.05}\text{K}_{0.04})(\text{Li}_{1.79}\text{Ca}_{0.21})(\text{Al}_{2.21}\text{Mg}_{1.93}\text{Fe}^{2+}_{0.68}\text{Li}_{0.08}\text{Fe}^{3+}_{0.05}\text{Mn}_{0.05})\text{Si}_{8.00}\text{O}_{22}\text{O}_{0.98}\text{F}_{0.74}(\text{OH})_{0.28}$	269, 284

Element system	Chemical formula	Page
<b>Al-Ca-F -Fe-H -K -Li-Mg-Mn-Na-O -Si-Ti</b>	$(\text{Li}_{1.79}\text{Na}_{0.03}\text{K}_{0.01}\text{Ca}_{0.03})(\text{Mg}_{1.76}\text{Fe}^{2+}_{1.21}\text{Fe}^{3+}_{0.24}\text{Mn}_{0.03}\text{Ti}_{0.02}\text{Al}_{1.84})(\text{Si}_{7.89}\text{Al}_{0.11})\text{O}_{22}(\text{OH})_{1.86}\text{F}_{0.08}\text{O}^{2-}_{0.06}$	265, 269
	$(\text{Li}_{1.90}\text{Na}_{0.05}\text{K}_{0.03}\text{Ca}_{0.08})(\text{Mg}_{2.01}\text{Mn}_{0.02}\text{Fe}^{2+}_{0.99})\text{-(Al}_{1.75}\text{Fe}^{3+}_{0.03}\text{Ti}_{0.02})\text{Si}_{7.92}\text{O}_{22.06}(\text{OH})_{1.84}\text{F}_{0.10}$	269, 283
	$(\text{Na}_{0.037}\text{K}_{0.290})(\text{Ca}_{0.013}\text{Na}_{1.987})(\text{Mg}_{0.011}\text{Li}_{0.334}\text{Mn}_{0.182}\text{Fe}^{2+}_{2.299}\text{Fe}^{3+}_{2.025}\text{Ti}_{0.016}\text{Al}_{0.103})\text{-(Si}_{7.748}\text{Al}_{0.252})\text{O}_{22}\text{F}_{1.253}(\text{OH})_{0.892}$	266, 271
	$\text{Na}_{7.56}\text{K}_{3.80}\text{Li}_{3.88}\text{Ca}_{0.05}\text{Mn}_{5.77}\text{Fe}^{2+}_{2.15}\text{Fe}^{3+}_{0.03}\text{Mg}_{0.04}\text{Ti}_{7.75}\text{Si}_{31.45}\text{Al}_{0.66}\text{O}_{95.5}(\text{OH},\text{F})_{0.6}$	465
<b>Al-Ca-F -Fe-H -K -Li-Mg-Mn-Na-O -Si-Ti-Zn</b>	$^{\text{A}}(\text{K}_{0.07}\text{Na}_{0.38})^{\text{B}}(\text{Na}_{0.70}\text{Li}_{1.24}\text{Ca}_{0.06})^{\text{C}}(\text{Mg}_{1.35}\text{Fe}^{2+}_{0.92}\text{Mn}^{2+}_{0.13}\text{Zn}_{0.31}\text{Fe}^{3+}_{1.71}\text{Al}_{0.10}\text{Ti}_{0.06}\text{Li}_{0.42})\text{Si}_8\text{O}_{22}\text{OH}_{1.51}\text{F}_{0.47}$	261, 266, 272
	$^{\text{A}}(\text{K}_{0.13}\text{Na}_{0.64})^{\text{B}}(\text{Na}_{1.27}\text{Li}_{0.62}\text{Ca}_{0.11})\text{C}(\text{Mg}_{1.47}\text{Fe}^{2+}_{0.58}\text{Mn}^{2+}_{0.12}\text{Zn}_{0.40}\text{Fe}^{3+}_{1.48}\text{Al}_{0.10}\text{Ti}_{0.12}\text{Li}_{0.73})\text{Si}_8\text{O}_{22}\text{OH}_{1.30}\text{F}_{0.72}$	266, 272
	$(\text{K}_{0.18}\text{Na}_{0.84})(\text{Na}_{1.86}\text{Ca}_{0.08}\text{Fe}^{2+}_{0.06})\text{Mg}_{3.09}\text{Zn}_{0.01}\text{Li}_{0.03}\text{Fe}^{3+}_{0.29}\text{Mn}^{3+}_{0.37}\text{Fe}^{2+}_{0.41}\text{Ti}^{4+}_{0.86}\text{Al}_{0.03})\text{Si}_{8.00}\text{O}_{22}(\text{OH})_{0.20}\text{F}_{0.26}\text{O}_{1.54}$	265, 271
	$(\text{Na}_{0.52}\text{K}_{0.04})(\text{Na}_{0.25}\text{Ca}_{0.05}\text{Li}_{1.70})(\text{Li}_{0.64}\text{Fe}^{3+}_{1.64}\text{Mg}_{1.49}\text{Fe}^{2+}_{0.85}\text{Al}_{0.21}\text{Ti}_{0.09}\text{Mn}_{0.07}\text{Zn}_{0.01})\text{Si}_8\text{O}_{22}\text{F}_{0.69}(\text{OH})_{1.31}$	271
	$(\text{Na}_{0.70}\text{K}_{0.03})(\text{Li}_{1.34}\text{Na}_{0.58}\text{Ca}_{0.08})(\text{Mg}_{1.75}\text{Fe}^{3+}_{1.65}\text{Li}_{0.88}\text{Fe}^{2+}_{0.32}\text{Al}_{0.21}\text{Ti}_{0.11}\text{Mn}^{2+}_{0.07}\text{Zn}_{0.01})\text{Si}_8\text{O}_{22}(\text{OH})_{1.35}\text{F}_{0.65}$	272, 284
<b>Al-Ca-F -Fe-H -K -Mg-Mn-Na-Nb-O -R -Si-Ta-Ti</b>	$(\text{Na}_{1.079}\text{K}_{1.572}\text{Ca}_{0.173}\text{R}_{0.123})(\text{Fe}_{4.439}\text{Mg}_{0.053}\text{Mn}_{1.862})\text{-(Ti}_{0.494}\text{Nb}_{1.492}\text{Ta}_{0.032})(\text{Si}_{7.467}\text{Al}_{0.235})\text{O}_{25.246}\text{F}_{0.325}(\text{OH})_{5.429}$ (R = rare earth element)	466
<b>Al-Ca-F -Fe-H -K -Mg-Mn-Na-O -Si</b>	$(\text{K}_{0.02}\text{Na}_{0.06})(\text{Na}_{0.04}\text{Ca}_{1.86})(\text{Mg}_{4.93}\text{Mn}_{0.05}\text{Fe}^{2+}_{0.02})\text{Si}_{7.95}\text{Al}_{0.05}\text{O}_{22}(\text{OH})_{1.87}\text{F}_{0.13}$	265, 270
	$(\text{Na}_{2.54}\text{K}_{0.27}\text{Ca}_{0.19})(\text{Mn}_{3.69}\text{Mg}_{0.63}\text{Fe}^{3+}_{0.33}\text{Al}_{0.31})\text{Si}_{8.0}\text{O}_{21.78}(\text{OH})_{2.18}\text{F}_{0.04}$	266, 271
<b>Al-Ca-F -Fe-H -K -Mg-Mn-Na-O -Si-Ti</b>	$\text{K}_{0.019}\text{Na}_{0.142}\text{Ca}_{0.348}\text{Mn}_{0.158}\text{Mg}_{4.048}\text{Fe}^{3+}_{0.137}\text{Fe}^{2+}_{2.102}\text{Ti}_{0.050}\text{Al}_{0.054}(\text{Si}_{7.742}\text{Al}_{0.258})\text{O}_{22}(\text{O},\text{F},\text{OH})_2$	265
	$^{\text{A}}(\text{K}_{0.02}\text{Na}_{0.65})^{\text{B}}(\text{Ca}_{1.17}\text{Mn}_{0.83})\cdot^{\text{C}}(\text{Mn}_{0.27}\text{Fe}^{2+}_{0.09}\text{Mg}_{4.46}\text{Ti}_{0.01}\text{Al}_{0.16})\text{Si}_{7.18}\text{Al}_{0.82}\text{O}_{22}(\text{OH}_{1.91}\text{F}_{0.09})$	238
	$(\text{K}_{0.30}\text{Na}_{0.63})\text{Ca}_{1.99}(\text{Mn}_{3.26}\text{Mg}_{0.01}\text{Fe}^{2+}_{1.08}\text{Ti}_{0.09}\text{Al}_{0.54})(\text{Si}_{6.14}\text{Al}_{1.86})\text{O}_{22}(\text{OH},\text{F})_2$	265
	$(\text{K}_{0.39}\text{Na}_{0.62})(\text{Ca}_{1.63}\text{Na}_{0.25})(\text{Mg}_{2.85}\text{Mn}_{0.01}\text{Fe}^{2+}_{0.84}\text{Fe}^{3+}_{0.54}\text{Ti}_{0.49}\text{Al}_{0.39})(\text{Si}_{5.97}\text{Al}_{2.03})\text{O}_{22}\text{F}_{0.06}(\text{OH})_{1.94}$	270
	$(\text{K}_{0.40}\text{Na}_{0.60})(\text{Na}_{1.96}\text{Ca}_{0.04})(\text{Mg}_{2.02}\text{Al}_{0.22}\text{Fe}^{3+}_{1.26}\text{Mn}^{3+}_{0.76}\text{Ti}_{0.08}\square_{0.66})\text{Si}_8\text{O}_{22}(\text{OH},\text{F},\text{O}^{2-})_2$	271
	$(\text{K}_{0.41}\text{Na}_{0.53})\text{Ca}_{2.06}(\text{Mg}_{3.10}\text{Fe}^{2+}_{0.01}\text{Fe}^{3+}_{1.06}\text{Mn}_{0.01}\text{Ti}_{0.52}\text{Al}_{0.34})(\text{Si}_{5.87}\text{Al}_{2.13})\text{O}_{22}(\text{OH},\text{F})_2$	265, 270
	$\text{K}_{1.03}(\text{Ca}_{1.05}\text{Na}_{1.00})(\text{Mg}_{4.49}\text{Mn}_{0.01}\text{Fe}^{2+}_{0.28}\text{Ti}_{0.17})\text{-(Si}_{7.44}\text{Al}_{0.29})\text{O}_{22}\text{F}_{0.54}(\text{OH})_{1.46}$	271

Element system	Chemical formula	Page
<b>Al-Ca-F -Fe-H -K -Mg-Mn-Na-O -Si-Ti (cont.)</b>	$(K_{1.750}Ca_{0.032}Na_{2.015}(Fe^{2+}_{2.604}Mn_{1.077})Mg_{1.851}-Ti_{1.812}[(Si_{13.919}Al_{0.076})O_{12}]_2(OH)_{5.980}F_{0.072})$	466
	$(Na_{0.29}K_{0.71})(Fe^{3+}_{0.92}Fe^{2+}_{3.60}Ti_{0.09}Al_{0.15}Mg_{0.11}-Mn_{0.13}Ca_{0.16}Na_{1.84})(Si_{7.83}Al_{0.17})O_{22}(OH,F,O)_2$	248, 271
	$(Na_{0.44}K_{0.29})(Na_{1.57}Ca_{0.43})(Mg_{4.14}Mn_{0.03}Fe^{2+}_{0.09}-Fe^{3+}_{0.60}Ti_{0.05}Al_{0.09})(Si_{7.85}Al_{0.15})O_{22}F_{1.22}(OH)_{0.78}$	271, 284
	$(Na_{0.48}K_{0.33})(Na_{1.81}Ca_{0.19})(Fe^{3+}_{1.42}Fe^{2+}_{3.27}Ti_{0.06}-Mg_{0.01}Mn_{0.09}Ca_{0.15})(Si_{7.49}Al_{0.46}Fe^{3+}_{0.05})O_{22}F_{0.19}-(OH,O)_{1.81}$	271, 278
	$(Na_{0.542}K_{0.381})(Na_{0.924}Ca_{0.915}Mn^{2+}_{0.161})(Al_{0.077}-Ti_{0.003}Fe_{0.196}Mg_{3.932}Mn_{0.953})(Si_{7.997}Al_{0.003})O_{22}-(OH)_{1.650}F_{0.350}$	271
	$(Na_{0.542}K_{0.381})(Na_{0.924}Ca_{0.915}Fe^{2+}_{0.161})(Al_{0.077}-Ti_{0.003}Fe_{0.196}Mg_{3.932}Mn_{0.953})(Si_{7.997}Al_{0.003})O_{22}-(OH)_{1.650}F_{0.350}$	271
	$(Na_{0.699}K_{0.214})(Ca_{0.757}Na_{0.878}Mn^{2+}_{0.365})(Al_{0.047}-Ti_{0.001}Fe_{0.225}Mg_{0.274}Mn_{0.818})(Si_{7.918}Al_{0.082})O_{22}-(OH)_{1.664}F_{0.336}$	271
	$(Na_{0.699}K_{0.214})(Ca_{0.757}Na_{0.878}Fe^{2+}_{0.365})(Al_{0.047}-Ti_{0.001}Fe_{0.225}Mg_{0.274}Mn_{0.818})(Si_{7.918}Al_{0.082})O_{22}-(OH)_{1.664}F_{0.336}$	271
	$(Na_{0.704}K_{0.257})(Na_{0.801}Ca_{0.877}Mn^{2+}_{0.322})(Al_{0.020}-Ti_{0.001}Fe_{0.196}Mg_{4.340}Mn_{0.765})(Si_{7.816}Al_{0.184})O_{22}-(OH)_{1.697}F_{0.303}$	271
	$(Na_{0.704}K_{0.257})(Na_{0.801}Ca_{0.877}Fe^{2+}_{0.322})(Al_{0.020}-Ti_{0.001}Fe_{0.196}Mg_{4.340}Mn_{0.765})(Si_{7.816}Al_{0.184})O_{22}-(OH)_{1.697}F_{0.303}$	271
	$(Na_{0.736}K_{0.213})(Ca_{0.758}Na_{0.867}Mn^{2+}_{0.375})(Al_{0.034}-Ti_{0.001}Fe_{0.240}Mg_{4.30}Mn_{0.800})(Si_{7.880}Al_{0.120})O_{22}-(OH)_{1.668}F_{0.332}$	271
	$(Na_{0.736}K_{0.213})(Ca_{0.758}Na_{0.867}Fe^{2+}_{0.375})(Al_{0.034}-Ti_{0.001}Fe_{0.240}Mg_{4.30}Mn_{0.800})(Si_{7.880}Al_{0.120})O_{22}-(OH)_{1.668}F_{0.332}$	271
	$Na_{2.15}K_{1.96}(Fe^{3+}_{0.46}Fe^{2+}_{3.08}Mn_{0.70}Ca_{0.25})Mg_{1.96}-Ti_{1.88}(Al_{0.27}Si_{7.81}O_{24})[O_{1.98}(OH)_{1.02}][(OH)_{3.70}-F_{0.30}]$	466
<b>Al-Ca-F -Fe-H -K -Mg-Mn-Na-O -Si-Ti-Zn</b>	$(Na_{0.78}K_{0.06})(Na_{1.53}Ca_{0.47})(Mg_{2.55}Fe^{2+}_{0.89}Mn_{0.01}-Zn_{0.01}Fe^{3+}_{0.32}Al_{1.21}Ti_{0.01})(Si_{7.14}Al_{0.86})O_{22}F_{1.16}-(OH)_{0.84}$	271, 284
<b>Al-Ca-F -Fe-H -K -Mg-Na-O -Si-Ti</b>	$(Na_{0.486}K_{0.275})(Mg_{3.323}Fe^{2+}_{0.318}Fe^{3+}_{1.076}Al_{0.069}-Ti_{0.034})(Na_{1.845}Ca_{0.155})Si_{8.05}O_{22}(OH)_{2.441}F_{0.476}$	284
<b>Al-Ca-F -Fe-H -K -Na-Nb-O -Si-Ti-Zr</b>	$(Na_{3.66}Ca_{0.25}K_{0.02})(Ti_{1.72}Zr_{0.15}Nb_{0.07}Fe_{0.02})-(Si_{7.87}Al_{0.13})O_{21.98}F_{0.02} \cdot 4H_2O$	434
<b>Al-Ca-F -Fe-H -Mg-Mn-Na-O -Si</b>	$Na_{0.03}Ca_{0.18}(Mg_{4.11}Mn_{2.02}Fe^{2+}_{0.54})Si_{7.95}Al_{0.05}O_{22}-F_{0.34}(OH)_{1.66}$	270



Element system	Chemical formula	Page
<b>Al-Ca-F -Fe-H -Mg-Mn-Na-O -Si (cont.)</b>	$\text{Na}_{0.03}\text{Ca}_{0.19}\text{Mg}_{3.69}\text{Mn}_{1.63}\text{Fe}_{1.35}\text{Al}_{0.02}\text{Si}_{8.02}\text{O}_{22}(\text{OH})_{1.99}\text{F}_{0.10}$	270, 284
<b>Al-Ca-F -Fe-H -Mg-Mn-Na-O -Si-Ti</b>	$(\text{Na}_{0.626}\text{Ca}_{0.302})(\text{Ca}_{0.990})_2(\text{Mg}_{0.651}\text{Fe}_{0.215}\text{Al}_{1.07}\text{Ti}_{0.018}\text{Mn}_{0.02})_5(\text{Si}_{0.767}\text{Al}_{0.233})_8\text{O}_{23.16-x}(\text{OH})_{2x}\text{F}_{0.841}$	270
<b>Al-Ca-F -Ga-Mg-Na-O -Si</b>	$\text{NaCa}_2\text{Mg}_4\text{GaSi}_6\text{Al}_2\text{O}_{22}\text{F}_2$	267
<b>Al-Ca-F -H -Mg-Na-O -Sc-Si</b>	$\text{NaCa}_2(\text{Mg}_4\text{Sc})(\text{Al}_2\text{Si}_6)\text{O}_{22}(\text{OH},\text{F})$	245
<b>Al-Ca-F -H -Mg-Na-O -Si</b>	$\text{NaCa}_2(\text{Mg}_{4+x}\text{Al}_{1-x})(\text{Si}_{6+x}\text{Al}_{2-x})\text{O}_{22}[(\text{OH})_{1-y}\text{F}_y]_2$	230, 251, 292, 315
<b>Al-Ca-F -Mg-Na-O -Sc-Si</b>	$\text{NaCa}_2(\text{Mg}_4\text{Sc})(\text{Al}_2\text{Si}_6)\text{O}_{22}(\text{OH},\text{F})$	245
	$\text{NaCa}_2\text{Mg}_4\text{ScSi}_6\text{Al}_2\text{O}_{22}\text{F}_2$	267, 278, 281
<b>Al-Ca-F -Mg-Na-O -Si</b>	$\text{NaCa}_2\text{Mg}_4\text{AlSi}_6\text{Al}_2\text{O}_{22}\text{F}_2$	267
<b>Al-Ca-Fe-H -K -Li-Mg-Mn-Na-Ni-O -Si-Ti-Zn</b>	$(\text{K}_{0.40}\text{Na}_{0.61})(\text{Na}_{1.71}\text{Ca}_{0.29})(\text{Mg}_{1.81}\text{Zn}_{0.01}\text{Ni}_{0.02}\text{Li}_{0.90}\text{Fe}^{3+}_{0.71}\text{Mn}^{3+}_{0.85}\text{Ti}^{4+}_{0.60}\text{Al}_{0.10})(\text{Si}_{7.96}\text{Al}_{0.04})\text{O}_{22}(\text{OH})_{0.80}\text{O}_{1.20}$	266, 272, 284
<b>Al-Ca-Fe-H -K -Li-Mg-Mn-Na-O -Si</b>	$(\text{K}_{0.17}\text{Na}_{0.50})(\text{Na}_{1.73}\text{Ca}_{0.27})(\text{Li}_{0.16}\text{Mg}_{3.69}\text{Mn}^{3+}_{0.06}\text{Fe}^{3+}_{1.14})(\text{Si}_{7.90}\text{Al}_{0.10})\text{O}_{22}(\text{OH})_2$	271, 277
	$(\text{Li}_{0.54}\text{Na}_{0.43}\text{K}_{0.01})(\text{Mn}_{3.60}\text{Mg}_{0.20}\text{Ca}_{0.09}\text{Al}_{0.05}\text{Fe}^{3+}_{0.03})\text{Si}_{4.98}\text{O}_{13.90}(\text{OH})_{1.10}$	405
<b>Al-Ca-Fe-H -K -Mg-Mn-Na-O -Si</b>	$(\text{Ca}_{3.85}\text{Mn}_{0.11}\text{Na}_{0.03}\text{K}_{0.03})(\text{Fe}_{1.26}\text{Mn}_{0.49}\text{Mg}_{0.26})\text{Fe}^{3+}_{1.97}\text{Al}_{0.01}(\text{Si}_{9.83}\text{Al}_{0.17})\text{O}_{27.73}(\text{OH})_{2.27}$	405
	$(\text{K}_{0.010}\text{Na}_{0.150})(\text{Ca}_{1.806}\text{Na}_{0.194})(\text{Mn}_{0.007}\text{Fe}^{2+}_{0.626}\text{Mg}_{4.164}\text{Al}_{0.178})(\text{Si}_{7.905}\text{Al}_{0.095})\text{O}_{22}(\text{OH})$	313
	$\text{K}_{0.04}\text{Na}_{0.02}\text{Ca}_{0.02}\text{Mg}_{2.46}\text{Mn}_{0.03}\text{Fe}_{4.42}\text{Al}_{0.02}(\text{Si}_{7.97}\text{Al}_{0.03})\text{O}_{22}(\text{OH})_{2.02}$	270, 284
	$(\text{Mn}_{6.16}\text{Fe}_{0.56}\text{Mg}_{0.08}\text{Na}_{0.12}\text{Ca}_{0.08})(\text{Ca}_{1.97}\text{K}_{0.06})\text{O}_{27.95}(\text{OH})_2(\text{H}_2\text{O})_{5.36}(\text{Si}_{9.96}\text{Al}_{0.06})$	405
	$(\text{Na}_{0.47}\text{K}_{0.01}\text{Ca}_{0.03})(\text{Ca}_{1.03}\text{Mn}_{0.97})(\text{Mg}_{4.55}\text{Mn}_{0.31}\text{Al}_{0.10}\text{Fe}_{0.04})(\text{Si}_{7.49}\text{Al}_{0.51})\text{O}_{22.13}(\text{OH})_{1.87}$	270, 284
<b>Al-Ca-Fe-H -K -Mg-Mn-Na-O -Si-Ti</b>	$(\text{Ca}_{1.90}\text{Na}_{0.10})(\text{Na}_{0.63}\text{K}_{0.35})(\text{Mg}_{3.07}\text{Mn}^{2+}_{0.02}\text{Fe}^{2+}_{0.68}\text{Fe}^{3+}_{0.86}\text{Ti}^{4+}_{0.35}\text{Al}_{0.02})(\text{Si}_{5.94}\text{Al}_{2.06})\text{O}_{22}(\text{OH})_{1.60}$	265, 270
	$(\text{Ca}_{0.199}\text{Na}_{1.833}\text{K}_{0.003})(\text{Mn}_{0.008}\text{Mg}_{2.368}\text{Fe}^{2+}_{0.695}\text{Fe}^{3+}_{0.295}\text{Ti}_{0.068}\text{Al}_{1.529})(\text{Si}_{7.880}\text{Al}_{0.120})\text{O}_{22}(\text{OH})_2$	271, 277, 284
	$(\text{Ca}_{0.336}\text{Na}_{1.865}\text{K}_{0.026})(\text{Mn}_{0.009}\text{Mg}_{2.609}\text{Fe}^{2+}_{0.624}\text{Fe}^{3+}_{1.796}\text{Ti}_{0.009})(\text{Si}_{7.903}\text{Al}_{0.034})\text{O}_{22}(\text{OH})_2$	271, 277, 284
	$\text{K}_{0.005}\text{Na}_{0.015}\text{Ca}_{0.092}\text{Mg}_{3.256}\text{Mn}_{0.097}\text{Fe}^{2+}_{3.157}\text{Fe}^{3+}_{0.184}\text{Al}_{0.052}\text{Ti}_{0.004}\text{Si}_{8.035}\text{O}_{22}(\text{OH})_{1.901}$	270
	$(\text{K}_{0.022}\text{Na}_{0.134})(\text{Na}_{1.422}\text{Ca}_{1.422})(\text{Mg}_{2.676}\text{Mn}_{0.036}\text{Fe}^{2+}_{1.535}\text{Fe}^{3+}_{0.271}\text{Ti}_{0.086}\text{Al}_{0.840})(\text{Si}_{6.372}\text{Al}_{1.628})\text{O}_{22}(\text{OH})_2$	271
	$(\text{K}_{0.034}\text{Na}_{0.088})(\text{Na}_{0.049}\text{Ca}_{1.930})(\text{Mn}_{0.021})(\text{Mn}_{0.211}\text{Fe}^{2+}_{2.915}\text{Mg}_{1.578}\text{Ti}_{0.005}\text{Al}_{0.291})(\text{Si}_{7.625}\text{Al}_{0.375})\text{O}_{22}(\text{OH})_2$	270
	$(\text{K}_{0.10}\text{Na}_{0.27})(\text{Na}_{0.41}\text{Ca}_{1.59})(\text{Mg}_{3.73}\text{Mn}_{0.01}\text{Fe}^{2+}_{0.42}\text{Fe}^{3+}_{0.15}\text{Ti}_{0.03}\text{Al}_{0.62})(\text{Si}_{6.73}\text{Al}_{1.27})\text{O}_{22}(\text{OH})_2$	271

Element system	Chemical formula	Page
<b>Al-Ca-Fe-H -K -Mg-Mn-Na-O -Si-Ti (cont.)</b>	$(K_{0.111}Na_{0.498})(Na_{0.092}Ca_{1.908})(Mn_{0.021}Fe^{3+}_{1.034}-Mg_{3.520}Ti_{0.028}Al_{0.346})(Si_{7.181}Al_{0.819})O_{22}(OH)_2$	270
	$(K_{0.25}Na_{0.69})(Ca_{1.72}Na_{0.04})(Mg_{2.42}Mn_{0.02}Fe^{2+}_{0.61}-Fe^{3+}_{1.04}Ti_{0.67}Al_{0.48})(Si_{5.75}Al_{2.25})O_{22}(OH)_2$	270
	$(K_{0.31}Na_{0.08})(Na_{1.72}Ca_{0.28})(Mg_{3.51}Mn_{0.48}Fe^{3+}_{0.87}-Ti_{0.10})(Si_{7.90}Al_{0.09})O_{22}(OH)_2$	271, 278
	$K_{0.35}Na_{0.63}(Ca_{1.90}Na_{0.10})(Al_{0.02}Ti^{4+}_{0.35}Fe^{3+}_{0.86}-Fe^{2+}_{0.68}Mn^{2+}_{0.02}Mg_{3.07})(Si_{5.94}Al_{2.06})O_{22}(OH)_{1.60}$	270, 284
	$K_{0.38}Na_{0.47}Ca_{1.86}Mg_{0.17}Mn_{0.11}Fe^{2+}_{3.48}Fe^{3+}_{0.82}-Ti_{0.06}Al_{0.35}(Al_{1.78}Si_{6.22})O_{22}(OH,F)_2$	277
	$(K_{0.41}Na_{0.53})Ca_{2.06}(Mg_{3.10}Fe^{2+}_{0.01}Fe^{3+}_{1.06}Mn_{0.01}-Ti_{0.52}Al_{0.34})(Si_{5.87}Al_{2.13})O_{22}(OH)_2$	265, 270
	$K_{0.44}Na_{0.32}Ca_{1.86}Mg_{0.86}Mn_{0.04}Fe^{2+}_{2.62}Fe^{3+}_{1.20}-Ti_{0.06}Al_{0.29}(Al_{1.86}Si_{6.14})O_{22}(OH,F)_2$	277
	$K_{0.45}Na_{1.01}Ca_{1.56}Mg_{0.52}Mn_{0.09}Fe^{2+}_{2.71}Fe^{3+}_{0.94}-Ti_{0.12}Al_{0.53}(Al_{2.07}Si_{5.93})O_{22}(OH)_2$	277
	$(K_{0.62}Na_{0.37})Ca_2(Mg_{1.48}Mn_{0.06}Fe^{2+}_{1.94}Fe^{3+}_{0.39}-Ti_{0.25}Al_{0.88})(Si_{5.24}Al_{2.76})O_{22}(OH)_2$	270, 284
	$(K_{0.75}Na_{0.22})Ca_{2.07}(Mg_{1.84}Mn_{0.01}Fe^{2+}_{1.37}Fe^{3+}_{0.39}-Ti_{0.38}Al_{0.94})(Si_{4.95}Al_{3.05})O_{22}(OH)_2$	270, 284
	$K_{0.789}Na_{0.255}Ca_{1.987}Mg_{1.753}Mn_{0.021}Fe^{2+}_{1.941}-Fe^{3+}_{0.088}Ti_{0.381}Al_{0.783}(Si_{5.412}Al_{2.588})O_{22}(OH)_2$	270
	$(Na_{0.607}K_{0.381})(Ca_{1.176}Na_{0.792}Mn^{2+}_{0.032})(Fe^{2+}_{2.429}-Mg_{0.866}Mn^{2+}_{0.153}Fe^{3+}_{1.307}Ti_{0.186}Al_{0.039})-(Si_{6.178}Al_{1.822})O_{22}(OH)_{1.910}$	261, 271
<b>Al-Ca-Fe-H -K -Mg-Na-O -Si</b>	$(K_{0.041}Na_{0.658})(Na_{0.168}Ca_{1.762})(Mg_{3.317}Fe^{2+}_{0.800}-Fe^{3+}_{0.288}Al_{0.665})(Si_{6.517}Al_{1.483})O_{22}(OH)_2$	271
	$(K_{0.058}Na_{0.828})(Na_{0.040}Ca_{1.872})(Mg_{3.414}Fe^{2+}_{0.814}-Fe^{3+}_{0.429}Al_{0.431})(Si_{6.294}Al_{1.706})O_{22}(OH)_2$	265, 270
<b>Al-Ca-Fe-H -K -Mg-Na-O -Si-Ti</b>	$(K_{0.25}Na_{0.63})(Na_{0.18}Ca_{1.82})Fe^{2+}_{0.03}Mg_{0.85}Ti_{2.58}-Fe^{3+}_{0.43}Al_{1.09}Si_8O_{22}(OH)_2$	277
	$(K_{0.41}Na_{0.49})(Na_{0.19}Ca_{1.81})(Fe^{2+}_{0.90}Mg_{2.83}Ti_{0.51}-Fe^{3+}_{0.50}Al_{0.23})(Si_{6.03}Al_{1.97})O_{22}(OH)_2$	277
	$(K_{0.44}Na_{0.51})(Na_{0.05}Ca_{1.83}Fe^{2+}_{0.12})(Fe^{2+}_{0.41}Mg_{3.56}-Ti_{0.51}Fe^{3+}_{0.31}Al_{0.21})(Si_{5.87}Al_{2.13})O_{22}(OH)_2$	277
	$(Na_{0.72}K_{0.02})(Na_{1.67}Ca_{0.33})(Mg_{1.82}Fe^{2+}_{0.18})-(Mg_{0.32}Fe^{3+}_{0.24}Ti_{0.02}Al_{1.43})(Mg_{0.8}Fe^{2+}_{0.2})-(Si_{7.24}Al_{0.76})O_{22}(OH)_2$	271
<b>Al-Ca-Fe-H -Li-Mg-Mn-Na-O -Si-Ti</b>	$(Na_{0.04}Ca_{0.02}Li_{1.91})(Mg_{1.98}Fe_{1.05}Mn_{0.03}Ti_{0.01}-Al_{1.93})(Al_{0.13}Si_{7.87})O_{22}(OH)_2$	260, 265, 269, 283
<b>Al-Ca-Fe-H -M -Mg-Na-O -Si</b>	$(Na_{1.8}Ca_{0.2})(Fe^{2+}_{1.17}Mg_{0.3};Fe^{3+}_{1.7}Al_{0.1}M_{0.1};-Fe^{2+}_{0.9}Mg_{0.1})Si_8O_{22}(OH)_2$ (M mainly Ti or Mn)	273, 274, 278
<b>Al-Ca-Fe-H -Mg-Mn-Na-O -Sc-Si</b>	$Ca(Sc_{0.74}Mg_{0.02}Al_{0.01}Fe^{2+}_{0.22})(Na_{0.01}Ca_{0.04}Mn_{0.10}-\square_{0.85})Si_3O_{8.02}(OH)$	341

Element system	Chemical formula	Page
<b>Al-Ca-Fe-H -Mg-Mn-Na-O -Si</b>	$(\text{Ca}_{0.36}\text{Na}_{0.06})(\text{Mg}_{5.57}\text{Mn}_{0.96}\text{Fe}^{2+}_{0.01}\text{Al}_{0.01})\text{Si}_{8.02}\text{O}_{22}(\text{OH})_2$	262
	$\text{Ca}_{1.99}(\text{Na}_{0.01}\text{Mg}_{0.06}\text{Mn}_{0.31}\text{Fe}^{2+}_{0.67})(\text{Fe}^{3+}_{1.00}\text{Al}_{0.02})\text{Si}_{5.00}\text{O}_{14}\text{OH}$	406
	$(\text{Mg}_{7.59}\text{Fe}_{2.07}\text{Mn}_{0.13}\text{Ca}_{0.11}\text{Al}_{0.05}\text{Na}_{0.04})(\text{Si}_{11.97}\text{Al}_{0.03})\text{O}_{32}(\text{OH})_4$	405
	$(\text{Mg}_{7.73}\text{Fe}_{2.11}\text{Mn}_{0.13}\text{Ca}_{0.08}\text{Na}_{0.05})(\text{Si}_{11.91}\text{Al}_{0.37})\text{O}_{32}(\text{OH})_4$	405
	$(\text{Mg}_{12.43}\text{Fe}_{4.07}\text{Mn}_{0.29}\text{Ca}_{0.16}\text{Na}_{0.02})(\text{Si}_{19.94}\text{Al}_{0.05})\text{O}_{54}(\text{OH})_6$	405
	$\text{Na}_{0.01}\text{Ca}_{0.02}\text{Mg}_{5.71}\text{Fe}_{1.24}\text{Mn}_{0.02}\text{Si}_{7.95}\text{Al}_{0.05}\text{O}_{22}(\text{OH})_2$	225, 269
	$\text{Na}_{0.04}\text{Ca}_{2.00}\text{Fe}^{2+}_{0.76}\text{Mn}_{0.15}\text{Mg}_{0.12}\text{Fe}^{3+}_{0.99}\text{Al}_{0.04}\text{Si}_{4.96}\text{O}_{14}(\text{OH})_{0.98}$	405
	$\text{Na}_{0.058}(\text{Ca}_{1.866}\text{Na}_{0.134})(\text{Mn}_{0.005}\text{Fe}^{3+}_{0.611}\text{Mg}_{4.221}\text{Al}_{0.134})\text{Si}_8\text{O}_{22}(\text{OH})$	313
	$\text{Na}_{0.06}\text{Ca}_{0.36}(\text{Mg}_{5.57}\text{Mn}_{0.96}\text{Fe}^{2+}_{0.01}\text{Al}_{0.01})\text{Si}_{8.02}\text{O}_{22}(\text{OH})_2$	270
<b>Al-Ca-Fe-H -Mg-Mn-Na-O -Si-Ti</b>	$(\text{Na}_{0.47}\text{Ca}_{0.03})(\text{Al}_{1.21}\text{Mg}_{4.52}\text{Fe}^{2+}_{1.14}\text{Mn}_{0.02}\text{Ti}_{0.06})(\text{Si}_{6.25}\text{Al}_{1.75})\text{O}_{22}(\text{OH})_2$	269
	$(\text{Na}_{1.03}\text{Ca}_{0.02})(\text{Mg}_{0.45}\text{Mn}_{2.98}\text{Fe}^{2+}_{6.41})(\text{Fe}^{3+}_{1.59}\text{Al}_{0.62})(\text{Si}_{11.96}\text{Ti}_{0.04})\text{O}_{31.3}(\text{OH})_{12.69}$	434
	$(\text{Na}_{1.75}\text{Ca}_{0.15})(\text{Mg}_{1.03}\text{Mn}_{0.01}\text{Fe}^{2+}_{1.94}\text{Fe}^{3+}_{0.31}\text{Ti}_{0.01}\text{Al}_{1.83})(\text{Si}_{7.94}\text{Al}_{0.06})\text{O}_{22}(\text{OH})_2$	265, 271
<b>Al-Ca-Fe-H -Mg-Mn-Na-O -Si-Zn</b>	$\text{Na}_{0.21}\text{Ca}_{0.28}\text{Mg}_{3.70}\text{Fe}^{2+}_{0.42}\text{Mn}_{1.60}\text{Zn}_{0.75}\text{Fe}^{3+}_{0.07}\text{Al}_{0.09}\text{Si}_{7.87}\text{O}_{22}(\text{OH})_2$	265, 270
<b>Al-Ca-Fe-H -Mg-Mn-O -Si</b>	$^{\text{A}}(\text{Ca}_{0.076}\text{Mg}_{3.445}\text{Fe}_{3.272}\text{Mn}_{0.199}\text{Al}_{0.008})(\text{Si}_{7.983}\text{Al}_{0.017})\text{O}_{22}(\text{OH})_2$	265, 272
	$(\text{Ca}_{0.110}\text{Mn}_{0.142}\text{Fe}^{2+}_{6.685}\text{Mg}_{0.096})(\text{Si}_{7.968}\text{Al}_{0.016})\text{O}_{22}(\text{OH})_2$	260, 270, 273, 274
	$\text{Ca}_{0.16}\text{Mg}_{2.37}\text{Mn}_{0.09}\text{Fe}_{4.44}(\text{Si}_{7.95}\text{Al}_{0.02})\text{O}_{22}(\text{OH})_{2.04}$	270, 284
	$\text{Ca}_{1.99}(\text{Fe}^{2+}_{0.65}\text{Mg}_{0.11}\text{Mn}^{2+}_{0.22})(\text{Fe}^{3+}_{0.95}\text{Al}_{0.07})\text{Si}_{5.01}\text{O}_{14}\text{OH}$	406
	$\text{Ca}_{1.99}(\text{Mg}_{0.20}\text{Mn}_{0.44}\text{Fe}^{2+}_{0.48})(\text{Fe}^{3+}_{0.94}\text{Al}_{0.03})\text{Si}_{5.00}\text{O}_{14}\text{OH}$	406
	$\text{Ca}_{1.99}(\text{Mg}_{0.21}\text{Mn}_{0.33}\text{Fe}^{2+}_{0.54})(\text{Fe}^{3+}_{0.97}\text{Al}_{0.02})\text{Si}_{5.00}\text{O}_{14}\text{OH}$	406
	$\text{Ca}_{2.00}(\text{Mg}_{0.19}\text{Mn}_{0.06}\text{Fe}^{2+}_{0.78})(\text{Fe}^{3+}_{0.92}\text{Al}_{0.05})\text{Si}_{5.00}\text{O}_{14}\text{OH}$	406
	$\text{Ca}_{2.01}(\text{Fe}^{2+}_{0.74}\text{Mg}_{0.13}\text{Mn}^{2+}_{0.10})(\text{Fe}^{3+}_{0.93}\text{Al}_{0.06})\text{Si}_{5.02}\text{O}_{14}\text{OH}$	406
	$\text{Ca}_{2.02}(\text{Mg}_{0.29}\text{Mn}_{0.07}\text{Fe}^{2+}_{0.83})(\text{Fe}^{3+}_{0.98}\text{Al}_{0.06})\text{Si}_{5.00}\text{O}_{14}\text{OH}$	406

Element system	Chemical formula	Page
<b>Al-Ca-Fe-H -Mg-Mn-O -Si (cont.)</b>	$(\text{Mg}_{4.05}\text{Fe}_{2.50}\text{Mn}_{0.17}\text{Ca}_{0.35})(\text{Si}_{7.9}\text{Al}_{0.1})\text{O}_{22}(\text{OH})_2$	265, 270
<b>Al-Ca-Fe-H -Mg-Na-O -Si</b>	$(\text{Ca}_{0.037}\text{Na}_{1.816})(\text{Al}_{0.022}\text{Fe}^{3+}_{2.149}\text{Fe}^{2+}_{2.492}\text{Mg}_{0.315})-(\text{Si}_{7.985}\text{Al}_{0.015})\text{O}_{22}(\text{OH})_2$	271, 277, 284
	$\square(\text{CaNa})\text{Mg}_3\text{AlFe}^{3+}\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
	$\square(\text{CaNa})\text{Mg}_3\text{Fe}^{3+}_2\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
	$\square(\text{CaNa})\text{Mg}_4(\text{Al},\text{Fe}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2$	257
	$\text{Na}_{0.03}\text{Ca}_{2.00}\text{Mg}_{4.92}\text{Fe}^{2+}_{0.04}\text{Fe}^{3+}_{0.02}\text{Al}_{0.05}\text{Si}_{7.81}-\text{Al}_{0.19}\text{O}_{21.99}(\text{OH})_{2.01}$	271
	$\text{Na}(\text{CaNa})\text{Mg}_3\text{AlFe}^{3+}\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	257
	$\text{Na}(\text{CaNa})\text{Mg}_3\text{Fe}^{3+}_2\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	257
	$\text{Na}(\text{CaNa})\text{Mg}_4(\text{Al},\text{Fe}^{3+})\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
	$\text{NaCa}_2(\text{Mg}_3(\text{Fe}^{3+},\text{Al})_2)\text{Si}_5\text{Al}_3\text{O}_{22}(\text{OH})_2$	256
	$\text{NaCa}_2\text{Mg}_4\text{FeSi}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256, 270, 284
	$\text{NaCa}_2\text{Mg}_{4-x}\text{Fe}_x\text{AlSi}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	230, 267
	$(\text{Na}_{1.96}\text{Ca}_{0.04})(\text{Mg}_{2.39}\text{Fe}^{2+}_{0.61}\text{Fe}^{3+}_{0.18}\text{Al}_{1.82})\text{Si}_8\text{O}_{22}-(\text{OH})_2$	265
<b>Al-Ca-Fe-H -Mg-O -Si</b>	$\square\text{Ca}_2(\text{Mg}_3\text{AlFe}^{3+})\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256
	$\square\text{Ca}_2(\text{Mg}_3\text{Fe}^{3+}_2)\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256
	$\square\text{Ca}_2(\text{Mg}_4(\text{Al},\text{Fe}^{3+})\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
<b>Al-Ca-Fe-H -Na-Nb-O -Si-Ti-Zr</b>	$(\text{Na}_{3.7}\text{Ca}_{0.3})(\text{Ti}_{1.7}\text{Zr}_{0.2})(\text{Nb},\text{Fe},\text{Al})_{0.1}(\text{Si}_{7.9}\text{Al}_{0.1})-\text{O}_{22}\cdot 5\text{H}_2\text{O}$	434
<b>Al-Ca-Fe-H -Na-O -Si</b>	$\square(\text{CaNa})\text{Fe}^{2+}_3\text{AlFe}^{3+}\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
	$\square(\text{CaNa})\text{Fe}^{2+}_3\text{Al}_2\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
	$\square(\text{CaNa})\text{Fe}^{2+}_3\text{Fe}^{3+}_2\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
	$\square(\text{CaNa})\text{Fe}^{2+}_4(\text{Al},\text{Fe}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2$	257
	$\text{Na}(\text{CaNa})\text{Fe}^{2+}_3\text{Al}_2\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	257
	$\text{Na}(\text{CaNa})\text{Fe}^{2+}_3\text{AlFe}^{3+}\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	257
	$\text{Na}(\text{CaNa})\text{Fe}^{2+}_3\text{Fe}^{3+}_2\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	257
	$\text{Na}(\text{CaNa})\text{Fe}^{2+}_4(\text{Al},\text{Fe}^{3+})\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
	$\text{NaCa}_2(\text{Fe}^{2+}_3(\text{Fe}^{3+},\text{Al})_2)\text{Si}_5\text{Al}_3\text{O}_{22}(\text{OH})_2$	257
	$\text{NaCa}_2(\text{Fe}^{2+}_4\text{Al})\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256
	$\text{NaCa}_2\text{Fe}^{2+}_4\text{Fe}^{3+}\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	242, 256, 277
	$\text{NaCa}_2\text{Fe}^{2+}_5\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	256
<b>Al-Ca-Fe-H -Na-O -Si-Ti</b>	$\text{NaCa}_2(\text{Fe}^{2+}_4\text{Ti})\text{Si}_6\text{Al}_2\text{O}_{23}(\text{OH})$	257
<b>Al-Ca-Fe-H -O -Si</b>	$\square\text{Ca}_2(\text{Fe}^{2+}_3\text{Al}_2)\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256
	$\square\text{Ca}_2(\text{Fe}^{2+}_3\text{AlFe}^{3+})\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256
	$\square\text{Ca}_2(\text{Fe}^{2+}_3\text{Fe}^{3+}_2)\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256
	$\square\text{Ca}_2(\text{Fe}^{2+}_4(\text{Al},\text{Fe}^{3+}))\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257

Element system	Chemical formula	Page
<b>Al-Ca-Fe-K -Mg-Mn-Na-O -Si-Ti</b>	$(\text{Ca}_{1.92}\text{Na}_{0.07}\text{K}_{0.01})(\text{Ca}_{0.05}\text{Mg}_{1.05}\text{Mn}_{0.03}\text{Fe}^{2+}_{0.44}\text{Ti}_{0.05}\text{Fe}^{3+}_{4.38})(\text{Fe}^{3+}_{2.00}\text{Al}_{2.40}\text{Si}_{1.60})\text{O}_{20}$	340, 341
	$\text{K}_{0.01}\text{Na}_{0.05}\text{Ca}_{1.83}\text{Mn}_{0.03}\text{Mg}_{2.38}\text{Fe}^{2+}_{2.86}\text{Ti}_{0.01}\text{Al}_{0.03}\text{Si}_{7.93}$ on the basis of 23O	277
	$\text{K}_{0.02}\text{Na}_{0.30}\text{Ca}_{1.67}\text{Mn}_{0.01}\text{Mg}_{4.18}\text{Fe}^{2+}_{0.48}\text{Fe}^{3+}_{0.15}\text{Ti}_{0.02}\text{Al}_{0.23}(\text{Al}_{0.15}\text{Si}_{7.85})$ on the basis of 23O	277
	$\text{K}_{0.02}\text{Na}_{0.52}\text{Ca}_{1.58}\text{Mn}_{0.03}\text{Mg}_{2.60}\text{Fe}^{2+}_{1.35}\text{Fe}^{3+}_{0.36}\text{Ti}_{0.07}\text{Al}_{0.86}(\text{Al}_{1.67}\text{Si}_{6.33})$ on the basis of 23O	277
	$(\text{Na}_{4.01}\text{K}_{0.01})(\text{Ca}_{0.15}\text{Mn}_{0.21}\text{Ti}_{1.79}\text{Fe}^{2+}_{9.00}\text{Mg}_{0.05}\text{Fe}^{2+}_{0.77})(\text{Si}_{11.67}\text{Al}_{0.24}\text{Fe}^{3+}_{0.09})\text{O}_{40}$	341
<b>Al-Ca-Fe-K -Mg-Mn-Na-O -Si-Zn</b>	$(\text{K}_{0.15}\text{Na}_{0.82})(\text{Na}_{1.97}\text{Ca}_{0.03})(\text{Mn}^{2+}_{1.66}\text{Mg}_{0.34}\text{Mn}^{3+}_{2.96}\text{Fe}^{3+}_{0.06}\text{Zn}_{0.01})(\text{Si}_{7.99}\text{Al}_{0.01})\text{O}_{22}\text{O}_2$	272, 284
<b>Al-Ca-Fe-K -Mg-Mn-O -Si-Ti</b>	$\text{K}_{0.01}\text{Na}_{0.07}\text{Ca}_{1.57}\text{Mn}_{0.04}\text{Mg}_{2.40}\text{Fe}^{2+}_{2.40}\text{Fe}^{3+}_{0.20}\text{Ti}_{0.01}\text{Al}_{0.10}\text{Si}_{8.05}$ on the basis of 23O	277
<b>Al-Ca-Fe-K -Mg-Na-O -Si-Ti</b>	$(\text{Na}_{0.35}\text{K}_{0.22}\text{Ca}_{3.56})(\text{Fe}^{2+}_{2.55}\text{Ti}^{4+}_{1.91}\text{Fe}^{3+}_{2.34}\text{Mg}^{2+}_{5.03})(\text{Si}^{4+}_{6.54}\text{Al}^{3+}_{5.44}\text{Fe}^{3+}_{0.02})\text{O}_{40}$	340, 341
	$(\text{Na}_{0.37}\text{K}_{0.63})(\text{Ca}_{1.99}\text{Na}_{0.01})(\text{Mg}_{3.13}\text{Fe}^{2+}_{0.62}\text{Fe}^{3+}_{0.22}\text{Al}_{0.97}\text{Ti}_{0.05})(\text{Si}_{5.99}\text{Al}_{2.01})\text{O}_{23}$	270
	$(\text{Na}_{0.64}\text{K}_{0.36})(\text{Ca}_{1.99}\text{Na}_{0.03})(\text{Mg}_{3.10}\text{Fe}^{2+}_{0.66}\text{Fe}^{3+}_{0.23}\text{Al}_{0.95}\text{Ti}_{0.06})(\text{Si}_{6.01}\text{Al}_{1.99})\text{O}_{23}$	270
	$(\text{Na}_{7.58}\text{K}_{0.14}\text{Ca}_{0.05})(\text{Ti}_{3.22}\text{Fe}^{3+}_{0.60}\text{Mg}_{0.18}\text{Fe}^{2+}_{0.10})(\text{Si}_{15.90}\text{Al}_{0.10})\text{O}_{43.4}$	434
<b>Al-Ca-Fe-K -Mn-Na-O -Si</b>	$\text{SiO}_2 - 50.80; \text{Al}_2\text{O}_3 - 0.38; \text{Fe}_2\text{O}_3 - 0.05; \text{CaO} - 44.70; \text{Na}_2\text{O} - 0.78; \text{K}_2\text{O} - 0.02; \text{MnO} - 0.01$ (in wt%)	383
<b>Al-Ca-Fe-Mg-Mn-Na-O -Si</b>	$\text{MnO} - 26.42, \text{MgO} - 16.74, \text{CaO} - 2.81, \text{SiO}_2 - 52.07, \text{FeO} - 0.97, \text{Na}_2\text{O} - 0.36, \text{Al}_2\text{O}_3 - 0.47$ (in wt%)	185
	$\text{SiO}_2 - 58.31; \text{Al}_2\text{O}_3 - 0.06; \text{FeO} - 0.13; \text{MnO} - 8.24; \text{MgO} - 27.17; \text{CaO} - 2.46; \text{Na}_2\text{O} - 0.22$	270
<b>Al-Ca-Fe-Mg-Mn-Na-O -Si-Ti</b>	$(\text{Na}_{3.97}\text{Ca}_{0.03})(\text{Fe}^{2+}_{8.06}\text{Ti}^{4+}_{2.07}\text{Fe}^{3+}_{0.47}\text{Mg}^{2+}_{0.70}\text{Mn}^{2+}_{0.59}\text{Ca}^{2+}_{0.11})(\text{Si}^{4+}_{11.26}\text{Fe}^{3+}_{0.53}\text{Al}^{3+}_{0.21})\text{O}_{40}$	340
<b>Al-Ca-Fe-Mg-Mn-Na-O -Si-Ti-V</b>	$(\text{Na}_{0.86}\text{Ca}_{0.09})(\text{Fe}^{2+}, \text{Fe}^{3+})_{0.93}\text{Ti}_{0.03}\text{Mn}_{0.03}\text{Si}_{2.00}\text{O}_6$ including V <sub>0.002</sub> , Mg <sub>0.006</sub> , Al <sub>0.007</sub>	118
<b>Al-Ca-Fe-Mg-Mn-Na-O -Si-Zn</b>	$(\text{Ca}_{0.92}\text{Na}_{0.06}\text{Mn}_{0.02})(\text{Zn}_{0.37}\text{Mn}_{0.18}\text{Fe}^{2+}_{0.19}\text{Fe}^{3+}_{0.12}\text{Mg}_{0.14})(\text{Si}_{1.94}\text{Al}_{0.06})\text{O}_6$	95, 124
	$\text{Ca}_{0.93}\text{Fe}_{0.61}\text{Mn}_{0.34}\text{Mg}_{0.08}\text{Na}_{0.01}\text{Zn}_{0.02}\text{Al}_{0.003}\text{Si}_2\text{O}_6$	95
<b>Al-Ca-Fe-Mg-Mn-O -Si</b>	$\text{Ca}_{0.96}\text{Mn}_{0.02}\text{Fe}_{0.66}\text{Mg}_{0.31}\text{Al}_{0.06}\text{Si}_{1.99}\text{O}_{6.02}$	56, 108, 118
	$\text{Ca}_{0.97}\text{Mg}_{0.06}\text{Fe}_{0.79}\text{Mn}_{0.17}\text{Al}_{0.01}\text{Si}_2\text{O}_{6.01}$	56, 108, 118
	$\text{Ca}_{1.0}\text{Fe}^{2+}_{0.68}\text{Mg}_{0.20}\text{Mn}_{0.15}\text{Al}_{0.05}\text{Fe}^{3+}_{0.04}\text{Si}_{1.92}\text{O}_6$	109, 118
	$\text{Ca}_{1.0}\text{Fe}^{2+}_{0.74}\text{Mg}_{0.16}\text{Mn}_{0.03}\text{Al}_{0.03}\text{Fe}^{3+}_{0.02}\text{Si}_{2.0}\text{O}_6$	109, 118
<b>Al-Ca-Fe-Mg-Mn-O -Si-Ti</b>	$\text{Ca}_{0.022}\text{Mn}_{0.028}\text{Fe}_{0.802}\text{Mg}_{1.134}\text{Al}_{0.036}\text{Ti}_{0.001}\text{Si}_{1.978}\text{O}_6$	106
<b>Al-Ca-Fe-Mg-Na-O -Si</b>	$\text{Ca}_{0.04}\text{Na}_{0.05}\text{Mg}_{1.968}\text{Fe}^{3+}_{0.013}\text{Fe}^{2+}_{0.13}\text{Al}_{0.008}\text{Si}_{1.932}\text{O}_6$	60
	$\text{Ca}_{0.96}\text{Na}_{0.03}\text{Mg}_{0.96}\text{Fe}_{0.03}\text{Al}_{0.02}\text{Si}_2\text{O}_6$	71

Element system	Chemical formula	Page
<b>Al-Ca-Fe-Mg-Na-O -Si (cont.)</b>	$\text{Ca}_{0.98}\text{Fe}_{0.99}\text{Mg}_{0.01}\text{Na}_{0.02}\text{Al}_{0.01}\text{Si}_2\text{O}_6$	95
	$\text{Ca}_{0.99}\text{Mg}_{0.98}\text{Fe}_{0.02}\text{Na}_{0.02}\text{Al}_{0.01}\text{Si}_{1.99}\text{O}_6$	95, 97, 99
	$\text{Ca}(\text{Mg}, \text{Fe}^{2+})\text{Si}_2\text{O}_6 - \text{Na}(\text{Fe}^{3+}, \text{Al}^{3+})\text{Si}_2\text{O}_6$	143
	$(\text{Ca}, \text{Na})(\text{Mg}, \text{Fe}, \text{Al})\text{Si}_2\text{O}_6$	84
	$(\text{Na}_{0.19}\text{Ca}_{0.82})(\text{Fe}^{3+}_{0.06}\text{Fe}^{2+}_{0.08}\text{Mg}_{0.72}\text{Al}_{0.14})\text{-(Si}_{1.97}\text{Al}_{0.03})\text{O}_6$	118
	$(\text{Na}_{0.380}\text{Ca}_{0.620})(\text{Fe}^{2+}_{0.061}\text{Al}_{0.380}\text{Mg}_{0.559})\text{Si}_2\text{O}_6$	106
	$(\text{Na}_{0.448}\text{Ca}_{0.552})(\text{Fe}^{3+}_{0.002}\text{Fe}^{2+}_{0.063}\text{Al}_{0.446}\text{Mg}_{0.489})\text{Si}_2\text{O}_6$	106
	$\text{Na}_{0.48}\text{Ca}_{0.47}\text{Mg}_{0.42}\text{Fe}^{2+}_{0.05}\text{Fe}^{3+}_{0.03}\text{Al}_{0.52}\text{Si}_2\text{O}_6$	64
	$(\text{Na}_{0.534}\text{Ca}_{0.466})(\text{Fe}^{3+}_{0.003}\text{Fe}^{2+}_{0.049}\text{Al}_{0.531}\text{Mg}_{0.417})\text{Si}_2\text{O}_6$	106
	$(\text{Na}_{0.542}\text{Ca}_{0.458})(\text{Fe}^{3+}_{0.007}\text{Fe}^{2+}_{0.049}\text{Al}_{0.535}\text{Mg}_{0.409})\text{Si}_2\text{O}_6$	106
	$(\text{Na}_{0.549}\text{Ca}_{0.451})(\text{Fe}^{2+}_{0.069}\text{Al}_{0.549}\text{Mg}_{0.382})\text{Si}_2\text{O}_6$	106
	$\text{Na}_{1.06}\text{Ca}_{0.06}\text{Mg}_{0.04}\text{Fe}_{1.01}\text{Al}_{0.06}\text{Si}_{1.91}\text{O}_6$	62, 116
	$(\text{Ca}_{0.51}\text{Na}_{0.48}\text{Mg}_{0.44}\text{Fe}^{2+}_{0.10}\text{Fe}^{3+}_{0.10}\text{Al}_{0.39}\text{Ti}_{0.01})\text{-(Si}_{1.96}\text{Al}_{0.04})\text{O}_6$	95
	$(\text{Ca}_{0.516}\text{Na}_{0.484})(\text{Mg}_{0.392}\text{Fe}^{2+}_{0.077}\text{Fe}^{3+}_{0.137}\text{Al}_{0.398}\text{Ti}_{0.005})\text{-(Si}_{1.918}\text{Al}_{0.082})\text{O}_6$	86, 95, 106
<b>Al-Ca-Fe-Mg-Na-O -Si-Ti</b>	$(\text{Ca}_{0.583}\text{Na}_{0.325}\text{Mg}_{0.582}\text{Fe}^{2+}_{0.116}\text{Fe}^{3+}_{0.123}\text{Al}_{0.233}\text{Ti}_{0.002})\text{-(Si}_{1.995}\text{Al}_{0.005})\text{O}_6$	95
	$(\text{Ca}_{0.98}\text{Na}_{0.03})(\text{Mg}_{0.68}\text{Fe}^{2+}_{0.07}\text{Fe}^{3+}_{0.03}\text{Al}_{0.16}\text{Ti}_{0.04})\text{-(Si}_{1.77}\text{Al}_{0.23})\text{O}_6$	59, 95, 118
	$(\text{Ca}_{1.01}\text{Na}_{0.01})(\text{Fe}^{3+}_{0.72}\text{Mg}_{0.16}\text{Al}_{0.04}\text{Ti}_{0.03}\text{Fe}^{3+}_{0.02})\text{-(Si}_{1.19}\text{Al}_{0.81})\text{O}_6$	25, 95, 106, 124
	$(\text{Na}_{0.48}\text{Ca}_{0.52})(\text{Fe}^{3+}_{0.14}\text{Fe}^{2+}_{0.08}\text{Mg}_{0.39}\text{Al}_{0.40}\text{Ti}_{0.01})\text{-(Si}_{1.92}\text{Al}_{0.08})\text{O}_6$	118
	$(\text{Na}_{0.54}\text{Ca}_{0.45})(\text{Fe}^{3+}_{0.14}\text{Fe}^{2+}_{0.33}\text{Mg}_{0.05}\text{Al}_{0.44}\text{Ti}_{0.05})\text{-(Si}_{1.95}\text{Al}_{0.05})\text{O}_6$	118
	$\{\text{Na}_{0.65}\text{Ca}_{0.34}\}[\text{Fe}^{3+}_{0.64}\text{Fe}^{2+}_{0.11}\text{Mg}_{0.19}\text{Al}_{0.04}\text{Ti}_{0.01}]\text{-(Si}_{1.98}\text{Al}_{0.01})\text{O}_6$	63, 95, 109, 118
	$\text{SiO}_2 - 20.85, \text{Al}_2\text{O}_3 - 40.20, \text{FeO} - 3.48, \text{MgO} - 12.17, \text{CaO} - 17.11, \text{Na}_2\text{O} - 0.02, \text{TiO}_2 - 0.06$ (in wt%)	340
	$\text{Ca}_{0.5}(\text{Mg}, \text{Fe}, \text{Al})_{0.5}\text{SiO}_3$	30
	$\text{Ca}_{0.52}\text{Mg}_{0.39}\text{Al}_{0.40}\text{Fe}_{0.21}\text{Si}_2\text{O}_6$	93
	$\text{Ca}_{0.742}\text{Mg}_{0.016}\text{Fe}_{0.100}\text{Al}_{1.384}\text{Si}_{1.534}\text{O}_6$	91, 103
<b>Al-Ca-Fe-Mg-O -Si</b>	$(\text{Ca}_{0.742}\text{Mg}_{0.087})(\text{Mg}_{0.016}\text{Al}_{0.888}\text{Fe}_{0.075})\text{-(Al}_{0.500}\text{Si}_{1.500})\text{O}_6$	33
	$\text{CaAl}_2\text{SiO}_6 - \text{CaFeAlSiO}_6 - \text{CaMgSi}_2\text{O}_6$	32
	$\text{CaFeAlSiO}_6 - \text{CaMgSi}_2\text{O}_6$	32, 61
	$\text{CaMg}_{0.8}\text{Fe}_{0.2}\text{Al}_{0.2}\text{Si}_{1.8}\text{O}_6$	114

Element system	Chemical formula	Page
<b>Al-Ca-Fe-Mg-O -Si (cont.)</b>	$\text{CaMg}_{0.95}\text{Fe}_{0.05}\text{Al}_{0.05}\text{Si}_{1.95}\text{O}_6$	114
	$\text{CaMgFe}_2\text{Al}_2\text{SiO}_{10}$	335
	$\text{Ca}(\text{Mg}, \text{Fe}, \text{Al})\text{Si}_2\text{O}_6$	30
	$\text{Ca}_{1.03}\text{Mg}_{0.61}\text{Fe}_{0.23}\text{Al}_{0.14}\text{Si}_2\text{O}_6$	30
	$(\text{Mg}_{0.83}\text{Fe}_{0.12}\text{Ca}_{0.006}\text{Al}_{0.04})(\text{Si}_{0.97}\text{Al}_{0.03})\text{O}_3$	97
	$(\text{Mg}_{0.85}\text{Fe}_{0.13}\text{Ca}_{0.02})(\text{Si}_{0.96}\text{Al}_{0.04})\text{O}_3$	97
<b>Al-Ca-Fe-Mg-O -Si-Ti</b>	$\text{CaFe}^{3+}\text{AlSiO}_6 - \text{CaMgSi}_2\text{O}_6 - \text{CaTiAl}_2\text{O}_6$	32
	$\text{Ca}(\text{Mg}^{2+}, \text{Fe}^{3+}, \text{Ti}^{4+}, \text{Al}^{3+})(\text{Si}, \text{Al})_2\text{O}_6$	32
	$\text{Ca}_2(\text{Fe}, \text{Mg}, \text{Ti})_6(\text{Si}, \text{Al})_6\text{O}_{20}$	335
<b>Al-Ca-Fe-Mn-Na-O -Si-Ti</b>	$\langle \text{Na}_{0.80}\text{Ca}_{0.01}\text{Mn}_{0.01} \rangle \{ \text{Fe}^{3+}_{0.74}\text{Ti}_{0.03}\text{Al}_{0.12}\text{Fe}^{2+}_{0.07} \} - [\text{Si}_{1.99}\text{Al}_{0.01}]\text{O}_6$	49, 62, 109
<b>Al-Ca-Fe-Na-O -Si</b>	$\text{NaFeSi}_2\text{O}_6 - \text{CaAl}_2\text{SiO}_6$	38
<b>Al-Ca-Fe-O -Si</b>	$\text{CaFe}_{0.910}\text{Al}_{0.590}\text{Si}_{0.500}\text{O}_6$	103
	$\text{CaFeAlSiO}_6$	25, 26, 31, 32, 61, 83, 91, 114
	$\text{CaFeAlSiO}_6 - \text{CaAl}_2\text{SiO}_6$	32
<b>Al-Ca-Fe-O -Si-Ti</b>	$\text{CaFe}^{3+}\text{AlSiO}_6 - \text{CaTi}^{4+}\text{Al}_2\text{O}_6$	32
<b>Al-Ca-Ga-H -Mg-Na-O -Si</b>	$\text{NaCa}_2\text{Mg}_4\text{GaSi}_6\text{Al}_2\text{O}_{22}(\text{OH}_2)$	267
<b>Al-Ca-H -In-Mg-Na-O -Si</b>	$\text{NaCa}_2\text{Mg}_4\text{InSi}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	267
<b>Al-Ca-H -K -Fe-Mg-Mn-Na-O -S -Si-Ti</b>	$\text{SiO}_2 - 37.38; \text{TiO}_2 - 0.22; \text{Al}_2\text{O}_3 - 29.23; \text{Fe}_2\text{O}_3 - 2.06; \text{FeO} - 17.88, \text{MnO} - 0.14; \text{MgO} - 2.51; \text{CaO} - 0.13; \text{Na}_2\text{O} - 0.14; \text{K}_2\text{O} - 0.09; \text{H}_2\text{O}^+ - 10.02; \text{H}_2\text{O}^- - 0.34; \text{SO}_3 - 0.12$	213
<b>Al-Ca-H -K -Mg-Na-O -Si-Ti</b>	$\text{SiO}_2 - 40.70, \text{TiO}_2 - 33.60; \text{Al}_2\text{O}_3 - 6.20, \text{MgO} - 0.36, \text{CaO} - 1.00, \text{Na}_2\text{O} - 12.00, \text{K}_2\text{O} - 1.8, \text{H}_2\text{O} - 4.80$	124
<b>Al-Ca-H -K -Mn-Na-Nb-O -Si-Ti-Zr</b>	$(\text{Na}_{2.66}\text{K}_{0.30}\text{Ca}_{0.07}\text{Mn}_{0.02})(\text{Zr}_{1.96}\text{Nb}_{0.08}\text{Ti}_{0.05}) - (\text{Si}_{9.99}\text{Al}_{0.01})\text{O}_{25.79} \cdot 9\text{H}_2\text{O}$	434
<b>Al-Ca-H -K -Na-Nb-O -Si-Ti</b>	$(\text{Na}_{7.64}\text{Ca}_{0.36})(\text{Ti}_{7.3}\text{Nb}_{0.7})\text{O}_8[\text{Si}_2\text{O}_6]_4[(\text{Si}_{2.78}\text{Al}_{1.22}) - \text{O}_{10}]_2[(\text{H}_2\text{O})_{5.34}\text{K}_{1.38}]$	95
<b>Al-Ca-H -K -Na-O -Si</b>	$(\text{Ca}, \text{Na}, \text{K}, \text{H})(\text{Si}, \text{Al})\text{O}_3$	335
<b>Al-Ca-H -K -O -Si</b>	$\text{Ca}_{4.42}\text{K}_{0.04}\text{Si}_{5.68}\text{Al}_{0.32}\text{O}_{15.56}(\text{OH})_{1.44} \cdot 5\text{H}_2\text{O}$	351
<b>Al-Ca-H -Mg-Mn-Na-O -Si</b>	$(\text{Na}, \text{Ca})(\text{Mn}, \text{Mg})_{12}(\text{Si}, \text{Al})_{12}(\text{O}, \text{OH})_{44}$	428
<b>Al-Ca-H -Mg-Na-O -Sc-Si</b>	$\text{NaCa}_2\text{Mg}_4\text{ScSi}_6\text{Al}_2\text{O}_{22}(\text{OH}_2)$	267
<b>Al-Ca-H -Mg-Na-O -Si</b>	$\square(\text{CaNa})\text{Mg}_3\text{Al}_2\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	257
	$\text{Na}_{0.95}\text{Ca}_{1.90}\text{Mg}_{4.15}\text{Al}_{2.85}\text{Si}_{6.1}\text{O}_{22}(\text{OH})_2$ (PCb) –	294
	$\text{Ca}_{1.7}\text{Mg}_{5.3}\text{Si}_8\text{O}_{22}(\text{OH})_2$ (TCb)	
	$\text{Na}_{0.975}\text{Ca}_{1.95}\text{Mg}_{4.075}\text{Al}_{2.925}\text{Si}_{6.05}\text{O}_{22}(\text{OH})_2$ (PCa) –	294
	$\text{Ca}_{1.8}\text{Mg}_{5.20}\text{Si}_8\text{O}_{22}(\text{OH})_2$ (TCa)	
	$\text{Na}(\text{CaNa})\text{Mg}_3\text{Al}_2\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	257
	$\text{NaCa}_2(\text{Mg}_4\text{Al})(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$	245, 251, 256, 267, 282
	$\text{NaCa}_2\text{Mg}_5\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	230, 256

Element system	Chemical formula	Page
<b>Al-Ca-H -Mg-Na-O -Si-Ti</b>	$\text{NaCa}_2(\text{Mg}_4\text{Ti})\text{Si}_6\text{Al}_2\text{O}_{23}(\text{OH})$	257
<b>Al-Ca-H -Mg-O -Si</b>	$(\text{Ca}_{1.8}\text{Mg}_{0.2})(\text{Mg}_{4.6}\text{Al}_{0.4})(\text{Si}_{7.6}\text{Al}_{0.4})\text{O}_{22}(\text{OH})_2$	246, 281
	$\text{Ca}_{1.8}\text{Mg}_{4.2}\text{Al}_2\text{Si}_7\text{O}_{22}(\text{OH})_2$	247, 249
	$\text{Ca}_{1.8}\text{Mg}_{5.2}\text{Si}_8\text{O}_{22}(\text{OH})_2 - \text{Ca}_{1.8}(\text{Mg}_{4.2}\text{Al})(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$	249, 311
	$\square\text{Ca}_2(\text{Mg}_3\text{Al}_2)\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256
	$\text{Ca}_2\text{Mg}_5[\text{Si}_8\text{O}_{22}(\text{OH})_2] - \text{Ca}_2\text{Mg}_3\text{Al}_2[\text{Al}_2\text{Si}_6\text{O}_{22}(\text{OH})_2]$	232
	$\text{CaCa}_2(\text{Mg}_4\text{Al})\text{Si}_5\text{Al}_3\text{O}_{22}(\text{OH})_2$	257
<b>Al-Ca-H -Na-Nb-O -Si-Ti</b>	$(\text{Na},\text{Ca})_4(\text{Ti},\text{Nb})_4[\text{Si}_2\text{O}_6]_2\text{O}_{10}(\text{Si},\text{Al})_4\text{O}_4 \cdot 3\text{H}_2\text{O}$	45
<b>Al-Ca-H -Na-O -Si</b>	$\text{Ca}_{5.0}\text{Na}_{0.036}\text{Al}_{0.060}\text{Si}_{5.93}\text{O}_{16}(\text{OH})_2 \cdot 4.91\text{H}_2\text{O}$	361
	$\text{Ca}_{5.0}\text{Na}_{0.218}\text{Al}_{0.30}\text{Si}_{5.72}\text{O}_{16}(\text{OH})_2 \cdot 5.00\text{H}_2\text{O}$	361
	$\text{Ca}_{5.0}\text{Na}_{0.284}\text{Al}_{0.60}\text{Si}_{5.41}\text{O}_{16}(\text{OH})_2 \cdot 5.50\text{H}_2\text{O}$	361
	$\text{Ca}_{5.0}\text{Na}_{0.520}\text{Al}_{0.90}\text{Si}_{5.10}\text{O}_{16}(\text{OH})_2 \cdot 5.79\text{H}_2\text{O}$	361
	$\text{Ca}_{5.0}\text{Na}_{0.680}\text{Al}_{1.20}\text{Si}_{4.81}\text{O}_{16}(\text{OH})_2 \cdot 6.42\text{H}_2\text{O}$	361
<b>Al-Ca-H -O -Si</b>	$\text{Ca}_{12}\text{Al}_2\text{Si}_{18}\text{O}_{33}(\text{OH})_{36}$	348, 356, 360
<b>Al-Ca-Mg-Mn-O -Si-Ti</b>	$\text{Ca}_{0.0245}\text{Mn}_{0.5415}\text{Mg}_{1.4325}\text{Ti}_{0.0015}\text{Al}_{0.0030}\text{Si}_{1.9969}\text{O}_6$	105
<b>Al-Ca-Mg-Na-O -Si</b>	$\text{CaMgSi}_2\text{O}_6 - \text{NaAlSi}_2\text{O}_6$	37
<b>Al-Ca-Mg-O -Si</b>	$(\text{CaMgSi}_2\text{O}_6)_x(\text{CaAl}_2\text{SiO}_6)_{1-x}$	65
	$\text{Ca}_{0.52}\text{Mg}_{1.46}\text{Al}_{0.05}\text{Si}_{1.98}\text{O}_6$	27
	$\text{CaAl}_2\text{SiO}_6 - \text{CaMgSi}_2\text{O}_6$	31, 65, 69, 169
	$\text{CaAl}_2\text{SiO}_6 - \text{CaMgSi}_2\text{O}_6 - \text{SiO}_2$	33
	$\text{CaMgSi}_2\text{O}_6 - \text{Mg}_2\text{Si}_2\text{O}_6 - \text{CaAl}_2\text{SiO}_6$	32
	$\text{Ca}^{[6]}[\text{Mg}_{1-x}\text{Al}_x]^{[4]}(\text{Si}_{1-x/2}\text{Al}_{x/2})\text{O}_6$	65
	$\text{Ca}_{1.85}^{[8]}\text{Mg}_{0.16}^{[6]}\text{Mg}_{4.63}^{[4]}\text{Al}_{0.66}^{[6]}\text{Al}_{0.64}\text{Si}_{7.34}$ per 23 O atoms	281
	$\text{Ca}_{1.88}^{[8]}\text{Mg}_{0.10}^{[6]}\text{Mg}_{4.06}^{[4]}\text{Al}_{0.9}^{[6]}\text{Al}_{0.94}\text{Si}_{7.1}$ per 23 O atoms	282
	$\text{Ca}_{1.88}^{[8]}\text{Mg}_{0.10}^{[6]}\text{Mg}_{4.67}^{[4]}\text{Al}_{0.29}^{[6]}\text{Al}_{0.33}\text{Si}_{7.71}$ per 23 O atoms	281
	$\text{Ca}_{1.91}^{[8]}\text{Mg}_{0.13}^{[6]}\text{Mg}_{4.11}^{[4]}\text{Al}_{1.0}^{[6]}\text{Al}_{0.88}\text{Si}_7$ per 23 O atoms	281
<b>Al-Ca-Mg-O -Si-Ti</b>	$\text{Ca}_{1.0}\text{Mg}_{0.3}\text{Ti}_{0.48}\text{Al}_{0.13}(\text{Al}_{0.74}\text{Si}_{1.26})\text{O}_6$	124
<b>Al-Ca-O -Sc-Si</b>	$\text{CaAl}_2\text{SiO}_6 - \text{CaScAlSiO}_6$	31, 76
	$\text{CaScAlSiO}_6$	31, 61, 76, 77, 83, 92, 182
<b>Al-Ca-O -Sc-Si-Ti</b>	$0.7\text{CaScAlSiO}_6 - 0.3\text{CaTiAl}_2\text{Si}_2\text{O}_6$	92
	$0.8\text{CaScAlSiO}_6 - 0.2\text{CaTiAl}_2\text{Si}_2\text{O}_6$	92
	$0.9\text{CaScAlSiO}_6 - 0.1\text{CaTiAl}_2\text{Si}_2\text{O}_6$	92
	$\text{Ca}_{1.00}\text{Sc}_{0.84}\text{Ti}_{0.27}\text{Al}_{1.16}\text{Si}_{0.73}\text{O}_6$	31, 92, 103
	$\text{CaScAlSiO}_6 - \text{CaTiAl}_2\text{O}_6$	33, 77



Element system	Chemical formula	Page
<b>Al-Ca-O -Si</b>	$\text{CaAl}_2\text{SiO}_6$	26, 31, 32, 38, 61, 69, 76, 77, 83, 91, 119-121, 123, 173
	$\text{CaAl}_2\text{SiO}_6 - \text{SiO}_2$	33
	$\text{Ca}_3\text{Al}_2\text{Si}_3\text{O}_{12}$	65
<b>Al-Ca-O -Ti</b>	$\text{CaTiAl}_2\text{O}_6$	33
<b>Al-Cl-F -Fe-H -K -Mg-Na-O -Si</b>	$(\text{Na}_{0.05}\text{K}_{0.01}\text{Fe}^{2+}_{5.33}\text{Mg}_{1.46}\text{Fe}^{3+}_{0.14}\text{Al}_{0.01})-(\text{Si}_{7.92}\text{Al}_{0.08})\text{O}_{22}(\text{OH})_{1.92}\text{F}_{0.05}\text{Cl}_{0.01}$	272, 277
<b>Al-Cl-F -Fe-H -Li-Mg-Mn-Na-O -Si</b>	$\text{Na}_x\text{Li}_2(\text{Mg},\text{Fe}^{2+},\text{Mn})_{7-y-z}\text{Al}_y(\text{Si}_{8-x-y+z}\text{Al}_{x+y-z})\text{O}_{22}-(\text{OH},\text{F},\text{Cl})_2$	220, 229
<b>Al-Cl-F -Fe-H -Li-Mg-Mn-O -Si</b>	$\square\text{Li}_2(\text{Mg},\text{Fe}^{2+},\text{Mn})_3(\text{Fe}^{3+},\text{Al})_2\text{Si}_8\text{O}_{22}(\text{OH},\text{F},\text{Cl})_2$	221
<b>Al-Cl-F -Fe-H -Li-Mg-O -Si</b>	$\square\text{Li}_2(\text{Mg},\text{Fe}^{2+})_3(\text{Fe}^{3+},\text{Al})_2\text{Si}_8\text{O}_{22}(\text{OH},\text{F},\text{Cl})_2$	220
<b>Al-Cl-K -Na-O -Si-Ti</b>	$\text{Na}_3\text{K}_6\text{Ti}_2[\text{Al}_2\text{Si}_8\text{O}_{26}]\text{Cl}_3$	419, 428
<b>Al-Cr-Na-O -Si</b>	$\text{NaAlSi}_2\text{O}_6 - \text{NaCrSi}_2\text{O}_6$	35
<b>Al-Cs-F -Fe-H -K -Mg-Mn-Na-Nb-O -Rb-Si-Ta-Ti-Zn-Zr</b>	$(\text{K}_{1.84}\text{Rb}_{0.13}\text{Cs}_{0.01})\text{Na}_{0.95}(\text{Mn}_{5.40}\text{Zn}_{0.73}\text{Fe}_{0.53}\text{Na}_{0.28}\text{Mg}_{0.05})(\text{Nb}_{1.33}\text{Zr}_{0.40}\text{Ti}_{0.24}\text{Ta}_{0.04})(\text{Si}_{7.71}\text{Al}_{0.32})\text{O}_{26}-(\text{OH})_4(\text{O}_{0.89}\text{F}_{0.11})$	466
<b>Al-Cu-Fe-H -K -Mg-Mn-Na-O -Si-Ta-Ti-Zr</b>	$(\text{Na}_{1.059}\text{K}_{1.375})(\text{Fe}^{2+}_{4.695}\text{Fe}^{3+}_{1.062}\text{Mg}_{0.096}\text{Mn}_{0.634}\text{Cu}_{0.068})(\text{Ti}_{2.197}\text{Ta}_{0.047}\text{Zr}_{0.231})(\text{Si}_{7.459}\text{Al}_{0.177})\text{O}_{25.921}(\text{OH})_{5.079}$	466
<b>Al-Cu-Fe-H -O -Si</b>	$\text{Cu}_{2-x}(\text{Al},\text{Fe})_x\text{H}_2(\text{Si}_2\text{O}_5)(\text{OH})_4 \cdot n\text{H}_2\text{O}$	210, 213
<b>Al-Cu-H -O -Si</b>	$(\text{Cu},\text{Al})_2\text{H}_2\text{Si}_2\text{O}_5(\text{OH})_4 \cdot n\text{H}_2\text{O}$	212
<b>Al-D -H -O -Si</b>	$(\text{H},\text{D})\text{AlSi}_2\text{O}_6$	94
<b>Al-F -Fe-H -K -Li-Mg-Mn-Na-O -Si</b>	$^A(\text{K}_{0.01}\text{Na}_{0.01})^B(\text{Li}_{1.88}\text{Mg}_{0.08}\text{Na}_{0.03}\text{Fe}^{2+}_{0.01})-^C(\text{Al}_{1.89}\text{Fe}^{2+}_{1.70}\text{Mg}_{1.39}\text{Mn}^{2+}_{0.02})\text{Si}_{8.00}\text{O}_{22}\text{OH}_{1.97}\text{F}_{0.03}$	265, 269, 284
	$\text{K}_{0.70}(\text{Mn}_{1.25}\text{Li}_{0.52}\text{Na}_{0.15}\text{Fe}_{0.05}\text{Mg}_{0.01})\text{Al}_{3.95}\text{Si}_{3.99}\text{O}_{11.75}(\text{OH})_{5.06}\text{F}_{3.19}$	213
<b>Al-F -Fe-H -K -Mg-Mn-Na-O -Si-Ti</b>	$(\text{K}_{0.01}\text{Na}_{0.33}\text{Mg}_{0.01}\text{Mn}_{0.31}\text{Fe}^{2+}_{4.40}\text{Fe}^{3+}_{0.35}\text{Ti}_{0.06}\text{Al}_{1.68})(\text{Al}_{1.97}\text{Si}_{6.03})\text{O}_{21.79}(\text{OH})_{2.15}\text{F}_{0.06}$	269, 283
<b>Al-F -Fe-H -K -Mg-O -Si</b>	$\text{K}_{0.002}(\text{Mg}_{0.65}\text{Fe}^{2+}_{0.32}\text{Fe}^{3+}_{0.03})\text{Al}_{1.97}\text{Si}_{2.00}\text{O}_{5.90}-(\text{OH})_{3.95}\text{F}_{0.15}$	213
	$\text{K}_{0.002}(\text{Mg}_{0.65}\text{Fe}^{2+}_{0.34}\text{Fe}^{3+}_{0.01})\text{Al}_{1.98}\text{Si}_{2.00}\text{O}_{5.92}-(\text{OH})_{3.96}\text{F}_{0.12}$	213
<b>Al-F -Fe-H -Li-Mg-Na-O -Si</b>	$\text{NaNa}_2(\text{Mg},\text{Fe}^{2+})_2(\text{Al},\text{Fe}^{3+})_2\text{LiSi}_8\text{O}_{22}(\text{OH},\text{F})_2$	230
<b>Al-F -Fe-H -Li-Mg-O -Si</b>	$\text{Li}_2(\text{Mg},\text{Fe}^{2+})_3(\text{Al},\text{Fe}^{3+})_2\text{Si}_8\text{O}_{22}(\text{OH},\text{F})_2$	230
<b>Al-F -Fe-H -Mg-O -Si</b>	$(\text{Mg}_{1-x}\text{Fe}^{2+}_x)(\text{Al}_{2-y}\text{Fe}^{3+}_y)\text{Si}_2\text{O}_6(\text{OH},\text{F})_4$	210, 211, 214, 217
<b>Al-F -H -K -Li-Mn-O -Si</b>	$\text{K}_x(\text{Mn}_{2-x}\text{Li}_x)\text{Al}_4\text{Si}_4(\text{OH})_4\text{F}_4$	209
<b>Al-F -Li-Mg-Na-O -Si</b>	$^A\text{Na}^B\text{Li}_2^C(\text{Mg}_2\text{Al}_2\text{Li})^T\text{Si}_8\text{O}_{22}^X\text{F}_2$	230
<b>Al-Fe-H -K -Mg-Mn-Na-O -Si-Ti</b>	$\text{SiO}_2 - 62.93; \text{Al}_2\text{O}_3 - 0.63; \text{Fe}_2\text{O}_3 - 14.09; \text{FeO} - 9.58; \text{MgO} - 0.42; \text{MnO} - 0.81; \text{Na}_2\text{O} - 7.11; \text{K}_2\text{O} - 1.74; \text{H}_2\text{O}^- - 0.38; \text{H}_2\text{O}^+ - 1.61; \text{TiO}_2 - 0.42$ (in wt%)	405
<b>Al-Fe-H -K -Na-Nb-O -Si-Ti</b>	$\text{Na}_3\text{K}_{0.1}\text{Ti}_{2.2}\text{Nb}_{0.2}\text{Fe}_{0.1}\text{Al}_{0.8}\text{Si}_4\text{O}_{15.6} \cdot \text{H}_2\text{O}$	95

Element system	Chemical formula	Page
<b>Al-Fe-H -Li-Mg-Na-O -Si</b>	$\square(\text{NaLi})\text{Mg}_3\text{Fe}^{3+}\text{Al}\text{Si}_8\text{O}_{22}(\text{OH})_2$	258
	$\text{NaLi}_2(\text{LiMg}_2\text{Fe}^{3+}\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$	256
	$\text{Na}(\text{NaLi})(\text{LiMg}_2\text{Fe}^{3+}\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$	258
	$\text{Na}_{1.98}\text{Li}_{0.02}(\text{Mg}_{1.98}\text{Fe}^{2+}_{1.02}\text{Fe}^{3+}_{0.40}\text{Al}_{1.60})\text{Si}_8\text{O}_{22}(\text{OH})_2$	265, 272
<b>Al-Fe-H -Li-Mg-O -Si</b>	$^{\text{A}}\square^{\text{B}}\text{Li}_2^{\text{C}}[(\text{Mg},\text{Fe}^{2+})_3(\text{Al},\text{Fe}^{3+})_2]^{\text{T}}\text{Si}_8\text{O}_{22}(\text{OH})_2$	229
<b>Al-Fe-H -Li-Na-O -Si</b>	$\square(\text{NaLi})(\text{Fe}^{2+}_3\text{Fe}^{3+}\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$	258
	$\text{NaLi}_2(\text{LiFe}^{2+}_2\text{Fe}^{3+}\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$	256
	$\text{Na}(\text{NaLi})(\text{LiFe}^{2+}_2\text{Fe}^{3+}\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$	258
<b>Al-Fe-H -Li-O -Si</b>	$\square(\text{Li}_2\text{Fe}^{2+}_3\text{Al}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$	256
<b>Al-Fe-H -Mg-Mn-Na-O -Si-Zn</b>	$\text{Na}_{0.03}\text{Mg}_{0.02}\text{Al}_{0.03}\text{Mn}_{0.23}\text{Zn}_{0.06}\text{Fe}_{6.68}\text{Si}_{7.97}\text{O}_{22}(\text{OH})_2$	228
<b>Al-Fe-H -Mg-Mn-O -Si</b>	$\text{Fe}^{2+}_{11.03}\text{Mn}_{1.14}\text{Mg}_{0.03}\text{Fe}^{3+}_{5.49}\text{Al}_{0.25}\text{Si}_{12.06}\text{O}_{40}(\text{OH})_{10.04}$	435
	$(\text{Mg}_{0.08}\text{Mn}_{0.86}\text{Fe}^{2+}_{10.90})(\text{Fe}^{3+}_{5.89}\text{Al}_{0.38})\text{Si}_{11.86}\text{O}_{39.95}(\text{OH})_{10.05}$	434
	$(\text{Mg}_{0.795}\text{Fe}^{2+}_{0.203}\text{Mn}_{0.002})\text{Al}_2\text{Si}_2\text{O}_6(\text{OH})_4$	213
<b>Al-Fe-H -Mg-Mn-O -Si-Ti</b>	$\text{Fe}^{2+}_{11.27}\text{Mn}_{0.03}\text{Mg}_{0.48}\text{Fe}^{3+}_{5.80}\text{Al}_{0.35}\text{Ti}_{0.01}\text{Si}_{12.07}\text{O}_{40}(\text{OH})_{8.68}$	435
	$\text{SiO}_2 - 36.79; \text{TiO}_2 - 0.23; \text{Al}_2\text{O}_3 - 29.60; \text{Fe}_2\text{O}_3 - 2.09; \text{FeO} - 17.65; \text{MnO} - 0.14; \text{MgO} - 2.48; \text{H}_2\text{O}^+ - 11.03$	213
<b>Al-Fe-H -Mg-Na-O -Si</b>	$\text{Na}(\text{Fe},\text{Mg},\text{Al})_{12}(\text{Si}_6\text{O}_{17})_2(\text{O},\text{OH})_{10}$	421, 428
	$\text{Na}_2(\text{Fe}^{2+}_{1.0}\text{Mg}_{1.0};\text{Fe}^{3+}_{1.5}\text{Al}_{0.5};\text{Fe}^{2+}_{0.7}\text{Mg}_{0.3})\text{Si}_8\text{O}_{22}(\text{OH})_2$	273, 278
	$\text{NaNa}_2(\text{Mg}_3\text{Fe}^{3+}_2)\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	258
<b>Al-Fe-H -Mg-O -Si</b>	$(\text{Fe},\text{Mg})\text{Al}_2\text{Si}_2\text{O}_6(\text{OH})_4$	212
	$(\text{Fe}^{2+}_{0.8}\text{Mg}_{0.2})(\text{Al}_{0.95}\text{Fe}^{3+}_{0.05})\text{Si}_2\text{O}_6(\text{OH})_4$	209
	$(\text{Mg},\text{Fe})(\text{Al},\text{Fe})_2\text{Si}_2\text{O}_6(\text{OH})_4$	212
<b>Al-Fe-H -Mn-Na-O -Si</b>	$\text{NaNa}_2(\text{Mn}^{2+}_4(\text{Fe}^{3+},\text{Al}))\text{Si}_8\text{O}_{22}(\text{OH})_2$	258
<b>Al-Fe-H -Mn-O -Si</b>	$(\text{Fe},\text{Mn})_6(\text{Fe},\text{Al})_3(\text{Si}_6\text{O}_{17})\text{O}_3(\text{OH})_5$	422, 428
	$\text{SiO}_2 - 35.00; \text{Al}_2\text{O}_3 - 32.66; \text{Fe}_2\text{O}_3 - 2.46; \text{MnO} - 18.51, \text{H}_2\text{O}^+ - 10.60$	213
<b>Al-Fe-H -Na-O -Si</b>	$\square\text{Na}_2(\text{Fe}^{2+}_3\text{Al}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$	257
	$\text{NaNa}_2(\text{Fe}^{2+}_3\text{Al}_2)\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	258
	$\text{NaNa}_2(\text{Fe}^{2+}_3\text{Fe}^{3+}_2)\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	258
	$\text{NaNa}_2(\text{Fe}^{2+}_4\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$	257
<b>Al-Fe-H -Na-O -Si-Ti</b>	$(\text{Na},\square)_2[(\text{Ti}^{4+},\text{Fe}^{3+})_4\{\text{Si}_2\text{O}_6\}_2\{\text{Si}_3\text{AlO}_{10}\}(\text{OH})_4]\cdot \text{H}_2\text{O}$	84
<b>Al-Fe-H -O -Si</b>	$\square\text{Fe}^{2+}_5\text{Al}_2\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	226, 256
<b>Al-Fe-Li-Mn-O -Si</b>	$\text{LiAlSi}_2\text{O}_6: \text{Fe}^{3+}, \text{Mn}^{2+}$	68

Element system	Chemical formula	Page
<b>Al-Fe-Li-O -P -Si</b>	$\text{Li}_{0.61}(\text{Si}_{2.37}\text{Al}_{0.60}\text{Fe}_{0.02}\text{P}_{0.01})\text{O}_6$	43, 95
<b>Al-Fe-Mg-O -Si</b>	$\text{Fe}_{0.05}\text{Mg}_{1.95}\text{Al}_{0.05}\text{Si}_{1.96}\text{O}_6$	121
	$\text{Fe}_{0.27}\text{Mg}_{1.65}\text{Al}_{0.03}\text{Si}_{2.02}\text{O}_6$	110, 121
<b>Al-Fe-Na-O -Si</b>	$\text{Na}(\text{Al}, \text{Fe})\text{Si}_2\text{O}_6$	84
<b>Al-Ga-Li-O -Si</b>	$\text{LiAlSi}_2\text{O}_6 - \text{LiGaSi}_2\text{O}_6$	42
<b>Al-H -Li-Mg-O -Si</b>	$\square(\text{Li}_2\text{Mg}_3\text{Al}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$	229, 230, 256
<b>Al-H -M -O -Si</b>	$\text{MAl}_2\text{Si}_2\text{O}_6(\text{OH})_4$ (M = Mn, Fe, Mg)	209
<b>Al-H -Mg-Na-O -Si</b>	$\square\text{Na}_2(\text{Mg}_3\text{Al}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$	257
	$\text{NaNa}_2(\text{Mg}_3\text{Al}_2)\text{Si}_7\text{AlO}_{22}(\text{OH})_2$	258
	$\text{NaNa}_2(\text{Mg}_4\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$	257
<b>Al-H -Mg-O -Si</b>	$\square\text{Mg}_5\text{Al}_2\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$	256
	$\text{MgAl}_2\text{Si}_2\text{O}_6(\text{OH})_4$	209
<b>Al-H -Mn-O -Si</b>	$\text{MnAl}_2\text{Si}_2\text{O}_6(\text{OH})_4$	212
<b>Al-H -O -Si</b>	$\text{HAlSi}_2\text{O}_6$	44, 84
	$\text{Si}_4\text{Al}_2\text{O}_{12}(\text{OH})_4$	209
<b>Al-K -Li-Na-O -Si-Ti-Zr</b>	$\text{SiO}_2 - 65, \text{Al}_2\text{O}_3 - 22, \text{Li}_2\text{O} - 5, \text{Na}_2\text{O} - 2, \text{K}_2\text{O} - 2$ with $\text{TiO}_2$ $\text{ZrO}_2$ (in wt %)	40
<b>Al-Li-O -Si</b>	$\text{LiAlSi}_2\text{O}_6$	39, 40, 42-44, 66, 72, 81, 84, 87, 94, 95, 101, 102, 120, 122, 171
	$\text{Li}_2\text{Al}_2\text{Si}_3\text{O}_{10}$	40, 95
	$\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot n\text{SiO}_2$	40
<b>Al-Mg-O -Si</b>	$\text{Mg}_2\text{Si}_2\text{O}_6 \cdot \text{Al}$	19
	$\text{MgSiO}_3 - \text{Al}_2\text{O}_3$	16
<b>B -Ba-Fe-K -Mg-Na-O -Si-Ti</b>	$\text{Na}_{7.64}\text{K}_{0.37}\text{Ba}_{1.88}\text{Mg}_{0.08}\text{Fe}_{0.08}\text{B}_{4.037}\text{Ti}_{3.85}\text{Si}_{20.003}\text{O}_{59.90}$	434
<b>B -Ba-Fe-K -Na-Nb-O -Si-Ti</b>	$\text{Na}_{8.21}\text{K}_{0.24}\text{Ba}_{1.71}\text{Fe}_{0.01}\text{B}_{4.15}\text{Ti}_{3.98}\text{Nb}_{0.13}\text{Si}_{19.57}\text{O}_{59.80}$	434
<b>B -Ba-Na-O -Si-Ti</b>	$\text{Na}_4\text{BaTi}_2\text{B}_2\text{Si}_{10}\text{O}_{30}$	421, 428
	$\text{Na}_{7.04}\text{Ba}_{1.85}\text{B}_{4.19}\text{Ti}_{4.15}\text{Si}_{19.98}\text{O}_{59.86}$	434
	$\text{Na}_{7.36}\text{Ba}_{1.77}\text{B}_{4.12}\text{Ti}_{4.16}\text{Si}_{20.24}\text{O}_{59.32}$	434
<b>B -Ca-Ce-H -O -Si-Ti</b>	$\text{Ca}_4\text{Ce}_2\text{Ti}\square_2[\text{Si}_4\text{B}_4\text{O}_{22}](\text{OH})_2$	459
<b>B -Ca-Fe-H -O -R -Si-Ti-Y</b>	$\text{M}^3\text{Ca}_2\text{M}^4(\text{Ca}, \text{Y})_2\text{M}^2(\text{HR}^{3+}, \square)_2\text{M}^1(\text{Ti}^{4+}, \text{Fe}^{3+}) - [\text{B}_4\text{Si}_4\text{O}_{16}(\text{O}, \text{OH})_6]^{05}(\text{OH})_2$ (HR = heavy rare earth element)	452
<b>B -Ca-Fe-Mg-Mn-Na-Nb-O -R -Si-Sr-Th-Ti</b>	$\text{SiO}_2 - 24.70; \text{TiO}_2 - 6.53; \text{ThO}_2 - 0.50; \text{Nb}_2\text{O}_5 - 0.75; \text{R}_2\text{O}_3 - 32.43; \text{Fe}_2\text{O}_3 - 1.32; \text{MnO} - 0.89; \text{MgO} - 0.42; \text{CaO} - 18.31; \text{SrO} - 0.04; \text{Na}_2\text{O} - 1.17; \text{B}_2\text{O}_3 - 12.70$ (R = rare earth element)	466
<b>B -Ca-H -O -R -Si-Y</b>	$\text{Ca}_3(\text{Y}, \text{R})_4\text{B}_4\text{Si}_6\text{O}_{27} \cdot 3\text{H}_2\text{O}$ (R = rare earth element)	451

Element system	Chemical formula	Page
<b>B -Ca-H -O -Si</b>	0.99 CaO·0.10 B <sub>2</sub> O <sub>3</sub> ·0.80 SiO <sub>2</sub> ·1.25 H <sub>2</sub> O	360, 383
	Ca <sub>10</sub> B <sub>2</sub> Si <sub>8</sub> O <sub>29</sub> ·12H <sub>2</sub> O	348, 356
<b>B -Co-Mg-Mn-Na-O -Si</b>	Co <sub>0.967</sub> Na <sub>0.013</sub> Mg <sub>0.958</sub> Mn <sup>2+</sup> <sub>0.059</sub> Mn <sup>3+</sup> <sub>0.012</sub> Si <sub>1.988</sub> - B <sub>0.011</sub> O <sub>6</sub>	185
<b>B -O -Si-T -W -X -Y -Z</b>	X <sub>4</sub> Y <sub>2</sub> ZT <sub>2</sub> [B <sub>4</sub> Si <sub>4</sub> O <sub>22</sub> ]W <sub>2</sub> (X = Na, Ca, Y, LR <sup>3+</sup> ; Y = Ca, Y, HR <sup>3+</sup> , Th <sup>4+</sup> , U <sup>4+</sup> ; Z = Al, Mn <sup>3+</sup> , Fe <sup>3+</sup> , Ti <sup>4+</sup> ; T = □, Li, Be; W = OH, F, O <sup>2-</sup> ; HR, LR: heavy, light rare earth element)	452
<b>Ba-Ca-Cl-F -Fe-H -K -Mn-Na-Nb-O -Si-Sr-Ti</b>	(Ca,K,Na,Sr,Ba) <sub>48</sub> [(Ti,Nb,Fe,Mn) <sub>12</sub> (OH) <sub>12</sub> - Si <sub>48</sub> O <sub>144</sub> ] (F,OH,Cl) <sub>14</sub>	382, 459
<b>Ba-Ca-F -H -K -Na-O -Si-Sr</b>	(Ca <sub>1.57</sub> Na <sub>0.51</sub> K <sub>0.93</sub> Sr <sub>0.03</sub> Ba <sub>0.07</sub> )Si <sub>4</sub> O <sub>10</sub> (OH <sub>0.58</sub> F <sub>0.28</sub> )· 0.72H <sub>2</sub> O	434
	(K,Na) <sub>5</sub> (Ca,Ba,Sr) <sub>8</sub> Si <sub>18</sub> O <sub>46</sub> (OH,F) <sub>n</sub> H <sub>2</sub> O	421, 428
<b>Ba-Ca-Fe-H -K -Mn-Na-Nb-O -Si-Sr-Ti</b>	(Sr,Ba) <sub>2</sub> K <sub>4</sub> (Ca,Na) <sub>14</sub> (□,Mn,Fe){ (Ti,Nb) <sub>4</sub> - (O,OH) <sub>4</sub> [Si <sub>6</sub> O <sub>17</sub> ] <sub>2</sub> [Si <sub>2</sub> O <sub>7</sub> ] <sub>3</sub> }(H <sub>2</sub> O,OH) <sub>n</sub>	379
	Sr <sub>1.40</sub> Ba <sub>0.65</sub> K <sub>3.75</sub> Ca <sub>8.50</sub> Na <sub>5.50</sub> Mn <sub>0.15</sub> Fe <sub>0.10</sub> { (Ti,Nb) <sub>4</sub> - (O,OH) <sub>4</sub> [Si <sub>6</sub> O <sub>17</sub> ] <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>3</sub> }(H <sub>2</sub> O,OH) <sub>3</sub>	382
<b>Ba-Ca-Fe-H -K -Mn-Nb-O -Si-Ti</b>	K <sub>3.2</sub> Ca <sub>1.2</sub> Ba <sub>0.2</sub> [Mn <sub>1.7</sub> Fe <sub>0.1</sub> (H <sub>2</sub> O) <sub>3.6</sub> ]- [Ti <sub>4</sub> (Ti <sub>3.8</sub> Nb <sub>0.2</sub> )(O,OH) <sub>8</sub> ]{Si <sub>4</sub> O <sub>12</sub> } <sub>4</sub> ·6.1H <sub>2</sub> O	341
<b>Ba-Ca-H -K -O -Si</b>	(Ba <sub>1.03</sub> K <sub>0.01</sub> Ca <sub>0.01</sub> )Si <sub>1.95</sub> O <sub>4.95</sub> ·3.08H <sub>2</sub> O	405
<b>Ba-Cu-O -Si</b>	BaCuSi <sub>2</sub> O <sub>6</sub>	33, 83, 92
	BaCu <sub>2</sub> Si <sub>2</sub> O <sub>7</sub>	417, 423-426, 428, 433, 446, 447
<b>Ba-F -Fe-H -Mn-Na-O -Si-Ti</b>	Na <sub>5</sub> Ba <sub>4</sub> (Fe,Mn) <sub>15</sub> Ti <sub>8</sub> Si <sub>15</sub> O <sub>64</sub> (F,OH) <sub>6</sub>	455, 459
<b>Ba-Fe-H -K -Mg-Mn-Na-Nb-O -Si-Ti</b>	Na <sub>0.3</sub> K <sub>3.2</sub> Ba <sub>0.2</sub> Ti <sub>6.8</sub> Nb <sub>1.0</sub> Fe <sub>0.35</sub> Mn <sub>1.3</sub> Mg <sub>0.2</sub> - (Si <sub>4</sub> O <sub>12</sub> ) <sub>4</sub> O <sub>8</sub> ·nH <sub>2</sub> O	341
<b>Ba-Fe-H -K -Mn-Na-Nb-O -Si-Ti</b>	[K <sub>3.2</sub> (H <sub>3</sub> O) <sub>1.5</sub> Na <sub>0.35</sub> Ba <sub>0.1</sub> (Mn <sub>1.12</sub> Nb <sub>0.28</sub> )·8.5H <sub>2</sub> O]- {[(Ti <sub>3.2</sub> Fe <sup>3+</sup> <sub>0.8</sub> )(Ti <sub>3.6</sub> Nb <sub>0.4</sub> )](OH <sub>7.6</sub> O <sub>0.4</sub> )(Si <sub>4</sub> O <sub>12</sub> ) <sub>4</sub> }	341
<b>Ba-Fe-K -Na-Nb-O -Si-Ti-Zr</b>	(Ba,K)(K,Na)Na(Ti,Fe,Nb,Zr) <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub>	398
	(Ba <sub>0.6</sub> K <sub>0.4</sub> )(K <sub>0.7</sub> Na <sub>0.3</sub> )Na(Ti <sub>0.72</sub> Fe <sub>0.16</sub> Nb <sub>0.06</sub> Zr <sub>0.06</sub> )- Si <sub>4</sub> O <sub>14</sub>	405
<b>Ba-H -O -Si</b>	BaSi <sub>2</sub> O <sub>5</sub> ·3H <sub>2</sub> O	398, 401, 407
<b>Ba-K -Na-O -Si-Ti</b>	(Na,K) <sub>2</sub> BaTi <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub>	401
	NaK(Ba,K)Ti <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub>	401
<b>Ba-Na-O -Si</b>	Na <sub>2</sub> BaSi <sub>2</sub> O <sub>6</sub>	34, 66, 84, 93, 120, 170
<b>Ba-Na-O -Si-Ti</b>	Na <sub>2</sub> BaTi <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub>	405
<b>Ba-O -Si</b>	BaSiO <sub>3</sub>	66, 83, 90, 120
<b>Ba-O -Si-Sr-Ti-V</b>	(Ba <sub>1.78</sub> Sr <sub>0.22</sub> )(V <sup>4+</sup> <sub>2.02</sub> Ti <sub>0.02</sub> )Si <sub>3.97</sub> O <sub>14</sub>	434
<b>Ba-O -Si-V</b>	BaVSi <sub>2</sub> O <sub>7</sub>	422, 428
<b>Be-Ca-Fe-H -Mg-O -Pb-Si</b>	(Ca,Pb) <sub>3</sub> (Mg,Fe) <sub>5</sub> Si <sub>6</sub> Be <sub>2</sub> O <sub>22</sub> (OH) <sub>2</sub>	84
<b>Be-Ca-Fe-Mg-O -Sb-Si</b>	Ca <sub>2</sub> Mg <sub>4</sub> Be <sub>2</sub> FeSbSi <sub>4</sub> O <sub>20</sub>	335

Element system	Chemical formula	Page
<b>Be-Fe-H -K -Na-Nb-O -Si-Sn</b>	$\text{SiO}_2 - 49.73; \text{SnO}_2 - 20.07; \text{Nb}_2\text{O}_5 - 0.75; \text{Fe}_2\text{O}_3 - 0.04; \text{BeO} - 8.02; \text{Na}_2\text{O} - 15.95; \text{K}_2\text{O} - 0.34; \text{H}_2\text{O} - 5.24$	466
<b>Be-Fe-H -Mg-Mn-Na-O -Si-Sn-Zn</b>	$\text{Na}_{4.18}\text{Mg}_{4.26}\text{Mn}^{2+}_{3.53}\text{Fe}^{2+}_{0.09}\text{Zn}_{0.31}\text{Be}_{8.23}\text{Sn}_{4.01}\text{Si}_{11.83}\text{O}_{48.77}\text{H}_{2.83}$	466
<b>Be-H -K -Na-O -Si</b>	$\text{Na}_{0.97}\text{K}_{0.02}\text{Be}_{1.0}\text{Si}_{3.01}\text{O}_{7.01}(\text{OH})_{0.99}$	466
<b>Be-H -Mg-Mn-Na-O -Si-Sn</b>	$\text{NaBe}_2(\text{Mn,Mg})_2\text{SnSi}_3\text{O}_{12}(\text{OH})$	453, 459
	$\text{Na}(\text{Mn}^{2+}, \text{Mg})_2\text{Sn}^{4+}[\text{Be}_2\text{Si}_3\text{O}_{12}(\text{OH})]$	466
<b>Be-H -Na-O -Si</b>	$\text{HNaBeSi}_3\text{O}_8$	466
	$\text{NaBeSi}_3\text{O}_7(\text{OH})$	455, 459
	$\text{Na}_{1.0}\text{Be}_{1.09}\text{Si}_{2.93}\text{O}_{6.94}(\text{OH})_{1.04}$	466
	$\text{Na}_2\text{Be}_2\text{Si}_6\text{O}_{15}\cdot\text{H}_2\text{O}$	376, 455, 459, 466
<b>Be-H -Na-O -Si-Sn</b>	$\text{Na}_4\text{SnBe}_2(\text{Si}_3\text{O}_9)_2\cdot 2\text{H}_2\text{O}$	452, 459, 466, 467
<b>Be-K -O -Si</b>	$\text{K}_2\text{Be}_2\text{Si}_6\text{O}_{15}$	374, 385, 455, 456, 459, 465, 474
<b>Be-Na-O -Si</b>	$\text{Na}_2\text{BeSi}_2\text{O}_6$	84, 93
<b>Bi-Eu-O -Pb-Si-Sr</b>	$\text{SrSiO}_3\text{:Pb}^{2+}, \text{Eu}^{3+}, \text{Bi}^{3+}$	81
<b>Bi-Eu-O -Si-Sr</b>	$\text{SrSiO}_3\text{:Eu}^{3+}, \text{Bi}^{3+}$	81, 90, 123, 186
<b>C -Ca-Er-H -O -Si-Y -Yb</b>	$(\text{Ca,Yb,Er})_4\text{Y}_4\text{Si}_8\text{O}_{20}(\text{CO}_3)_6(\text{OH})\cdot 7\text{H}_2\text{O}$	421, 428
<b>C -Ca-H -O -R -Si-Y</b>	$\text{Y}_4(\text{Ca}_3\text{R}_1)(\text{OH})(\text{H}_2\text{O})_5[\text{Si}_8\text{O}_{20}](\text{CO}_3)_6\cdot 2\text{H}_2\text{O}$ (R = rare-earth element)	434
<b>CaTs-Di</b>	$\text{Di}_x(\text{CaTs})_{1-x}$ (Di: Diopside, CaTs: Calcium Tschermak's)	94, 119, 120
<b>CaTs-Di-En</b>	$\text{Di}_{0.52}\text{En}_{0.46}\text{CaTs}_{0.02}$ (Di: Diopside, En: Enstatite, CaTs: Calcium Tschermak's)	27, 101
<b>Ca-Cl-Fe-H -Na-O -Si</b>	$\text{Na}_2\text{SiO}_3\cdot 9\text{H}_2\text{O} - \text{FeCl}_3\cdot 6\text{H}_2\text{O} - \text{CaO}$	360
<b>Ca-Co-Mg-O -Si</b>	$\text{CaMg}_{1-x}\text{Co}_x\text{Si}_2\text{O}_6$	80
<b>Ca-Co-Ni-O -Si</b>	$\text{CaCo}_{1-x}\text{Ni}_x\text{Si}_2\text{O}_6$	48, 108, 153
<b>Ca-Co-O -Si</b>	$\text{CaCoSi}_2\text{O}_6$	26, 46, 69, 91, 107, 108, 150, 173
<b>Ca-Cr-Fe-Na-O -Si</b>	$\text{CaFeSi}_2\text{O}_6 - \text{NaCrSi}_2\text{O}_6$	64
<b>Ca-Cr-Mg-Na-O -Sc-Si</b>	$\text{CaMgSi}_2\text{O}_6 - \text{NaCrSi}_2\text{O}_6 - \text{NaScSi}_2\text{O}_6$	81
	$\text{Na}_{0.4}\text{Ca}_{0.6}\text{Sc}_{0.2}\text{Cr}_{0.2}\text{Mg}_{0.6}\text{Si}_2\text{O}_6$	93
	$\text{Na}_{0.6}\text{Ca}_{0.4}\text{Sc}_{0.4}\text{Cr}_{0.2}\text{Mg}_{0.4}\text{Si}_2\text{O}_6$	93
	$\text{Na}_{0.8}\text{Ca}_{0.2}\text{Sc}_{0.6}\text{Cr}_{0.2}\text{Mg}_{0.2}\text{Si}_2\text{O}_6$	93
<b>Ca-Cr-Mg-Na-O -Si</b>	$\text{CaMgSi}_2\text{O}_6 - \text{NaCrSi}_2\text{O}_6$	37, 81
	$\text{Na}_{0.20}\text{Ca}_{0.80}\text{Cr}_{0.20}\text{Mg}_{0.80}\text{Si}_2\text{O}_6$	93
	$\text{Na}_{0.25}\text{Ca}_{0.75}\text{Cr}_{0.25}\text{Mg}_{0.75}\text{Si}_2\text{O}_6$	93
	$\text{Na}_{0.45}\text{Ca}_{0.55}\text{Cr}_{0.45}\text{Mg}_{0.55}\text{Si}_2\text{O}_6$	38, 93
	$\text{Na}_{0.50}\text{Ca}_{0.50}\text{Cr}_{0.50}\text{Mg}_{0.50}\text{Si}_2\text{O}_6$	93
	$\text{Na}_{0.75}\text{Ca}_{0.25}\text{Cr}_{0.75}\text{Mg}_{0.25}\text{Si}_2\text{O}_6$	93

Element system	Chemical formula	Page
<b>Ca-Cr-Mg-Na-O -Si-V</b>	$\text{NaVSi}_2\text{O}_6 - \text{NaCrSi}_2\text{O}_6 - \text{CaMgSi}_2\text{O}_6$	38
<b>Ca-Cr-Mg-O -Si</b>	$\text{CaMgSi}_2\text{O}_6 \cdot \text{Cr}$	24
<b>Ca-Cs-H -O -Si</b>	$\text{Cs}_5[\text{Si}_3\text{O}_8(\text{OH})_2 \cdot 4\text{H}_2\text{O} - \text{Ca}_5[\text{Si}_6\text{O}_{17}] \cdot 5\text{H}_2\text{O}$	359
<b>Ca-Cu-Fe-H -Mg-O -Si</b>	$\text{CuO} - 43.6; \text{FeO} - 0.3; \text{MgO} - 1.7; \text{CaO} - 1.8; \text{SiO}_2 - 40.8; \text{H}_2\text{O} - 13.8; \text{close to } \text{Cu}_9\text{Si}_{10}\text{O}_{29} \cdot 11\text{H}_2\text{O}$	213
<b>Ca-Cu-H -Mg-Mn-O -Si</b>	$\text{CuO} - 36.2; \text{MgO} - 2.3; \text{CaO} - 3.8; \text{MnO} - 0.5; \text{SiO}_2 - 41.5; \text{H}_2\text{O} - 14.6; \text{close to } \text{Cu}_5\text{Si}_6\text{O}_{17} \cdot 7\text{H}_2\text{O}$	213
<b>Ca-Eu-O -Si</b>	$\text{CaSiO}_3; \text{Eu}^{2+}$	81, 123
<b>Ca-F -Fe-H -K -Mg-Mn-Na-O -Si-Ti</b>	$\text{K}_{1.85}(\text{Ca}_{0.87}\text{Ti}_{0.13})(\text{Ca}_{0.85}\text{Na}_{0.15})(\text{Ca}_{1.71}\text{Fe}_{0.15}\text{Mn}_{0.08}\text{Mg}_{0.06}[\text{Si}_7\text{O}_{18}(\text{OH})](\text{F}_{0.61}\text{OH}_{0.39}))$	382
	$(\text{K}_{1.85}\text{Na}_{0.15})(\text{Ca}_{3.43}\text{Mg}_{0.06}\text{Mn}_{0.08}\text{Fe}_{0.15}\text{Ti}_{0.13})\text{Si}_{7.13}\text{O}_{17}(\text{O}_{1.63}\text{OH}_{2.02}\text{F}_{0.61})$	383
<b>Ca-F -Fe-H -K -Mn-Na-Nb-O -Si-Zr</b>	$\text{K}_2(\text{Na}, \text{Ca})(\text{Mn}, \text{Fe}^{2+})_7(\text{Zr}, \text{Nb})_2\text{Si}_8\text{O}_{26}(\text{OH})_4\text{F}$	459
<b>Ca-F -Fe-H -K -Mn-O -Si-Ti</b>	$(\text{H}_3\text{O}, \text{K})_2\text{Ca}(\text{Fe}^{2+}, \text{Mn})_{5.6}\text{Ti}_2\text{Si}_8\text{O}_{26}(\text{OH})_4\text{F}$	459
<b>Ca-F -Fe-H -Mg-Mn-O -Si</b>	$\text{Ca}_{0.06}\text{Mg}_{0.77}\text{Mn}_{0.05}\text{Fe}^{2+}_{6.14}\text{Si}_8\text{O}_{22}\text{F}_{0.84}(\text{OH})_{1.16}$	270
	$\text{Ca}_{0.06}\text{Mg}_{0.77}\text{Mn}_{0.05}\text{Fe}_{6.14}\text{Si}_{8.00}\text{O}_{22}(\text{OH})_{1.39}\text{F}_{0.51}$	270, 284
<b>Ca-F -Fe-Mg-Na-O -Si</b>	$(\text{Na}_{1.0})(\text{Na}_{1.02}\text{Ca}_{0.90})(\text{Mg}_{3.45}\text{Fe}^{2+}_{1.68})\text{Si}_{7.97}\text{O}_{22}\text{F}_2$	265
	$\text{CaNaNaMg}_{3.41}\text{Fe}_{1.59}\text{Si}_8\text{O}_{22}\text{F}_2$	234
<b>Ca-F -Ga-Mg-Na-O -Si</b>	$\text{Ca}_2\text{Mg}_5\text{Si}_8\text{O}_{22}\text{F}_2 - \text{NaCa}_2[\text{Mg}_4\text{Ga}][\text{Ga}_2\text{Si}_6]\text{O}_{22}\text{F}_2$	246
	$\text{Na}_{0.2}\text{Ca}_2\text{Mg}_{4.8}\text{Ga}_{0.6}\text{Si}_{7.6}\text{O}_{22}\text{F}_2$	279, 309
	$\text{Na}_{0.4}\text{Ca}_2\text{Mg}_{4.6}\text{Ga}_{1.2}\text{Si}_{7.2}\text{O}_{22}\text{F}_2$	279, 309
	$\text{Na}_{0.6}\text{Ca}_2\text{Mg}_{4.4}\text{Ga}_{1.8}\text{Si}_{6.8}\text{O}_{22}\text{F}_2$	279, 309
	$\text{Na}_{0.8}\text{Ca}_2\text{Mg}_{4.2}\text{Ga}_{2.4}\text{Si}_{6.4}\text{O}_{22}\text{F}_2$	279, 309
	$\text{NaCa}_2\text{Mg}_4\text{Ga}_3\text{Si}_6\text{O}_{22}\text{F}_2$	247, 280, 281, 309
<b>Ca-F -H -K -Na-O -Si</b>	$\text{K}_3\text{Na}_{2+x}\text{Ca}_{6-x}\text{Si}_{12}\text{O}_{30}(\text{O}_{1-x}(\text{F}, \text{OH})_{3+x})_4$	419
	$\text{K}_3\text{Na}_3\text{Ca}_5\text{Si}_{12}\text{O}_{30}(\text{O}, \text{OH}, \text{F})_4$	419, 428, 434,
<b>Ca-F -H -K -Na-O -Si-Ti</b>	$\text{K}_2\text{Ca}_4[\text{Si}_7\text{O}_{18}(\text{OH})](\text{O}, \text{OH}, \text{F}) - \text{K}_2\text{Ca}_2\text{NaTi}[\text{Si}_7\text{O}_{18}(\text{OH})]\text{O}$	375
<b>Ca-F -H -K -O -Si</b>	$\text{KCa}_5\Box(\text{Si}_2\text{O}_7)(\text{Si}_6\text{O}_{15})(\text{OH})\text{F}$	428, 433
	$\text{K}_2\text{Ca}_4[\text{Si}_7\text{O}_{18}(\text{OH})](\text{F}, \text{OH})$	374
	$\text{K}_2\text{Ca}_4\text{Si}_7\text{O}_{17}(\text{O}, \text{OH}, \text{F})_4$	379
<b>Ca-F -K -Mg-Na-O -Si</b>	$\text{K}(\text{NaCa})\text{Mg}_5\text{Si}_8\text{O}_{22}\text{F}_2$	234
<b>Ca-F -Mg-Na-O -Si</b>	$\text{Na}_{0.93}\text{Na}_{0.97}\text{Ca}_{1.02}\text{Mg}_{4.93}\text{Si}_{8.04}\text{O}_{22}\text{F}_{2.01}$	271
	$\text{Na}(\text{Na}_{1.0}\text{Ca}_{1.0})\text{Mg}_5\text{Si}_8\text{O}_{22}\text{F}_2$	234, 271
<b>Ca-F -Mg-O -Si</b>	$\text{Ca}_2\text{Mg}_5\text{Si}_8\text{O}_{22}\text{F}_2$	270, 278, 309
<b>Ca-F -Na-O -Si</b>	$\text{NaCa}_2\text{Si}_4\text{O}_{10}\text{F}$	418, 428

Element system	Chemical formula	Page
<b>Ca-Fe-Ga-O -Si</b>	$0.9\text{CaFeGaSiO}_6 - 0.1\text{CaGa}_2\text{SiO}_6$	92
	$\text{CaFe}^{3+}\text{Ga}^{3+}\text{SiO}_6 - \text{CaGa}^{3+}_2\text{SiO}_6$	33, 61
	$\text{CaFe}_{0.9}\text{Ga}_{1.1}\text{SiO}_6$	114
<b>Ca-Fe-H -K -Mg-Na-O -Si-Ti</b>	$\text{K}(\text{Na}, \text{Ca})(\text{Mg}_{5-x}\text{Fe}_x)\text{Si}_{8-y}\text{Ti}_y\text{O}_{22}(\text{OH})_2$	252
<b>Ca-Fe-H -K -Mn-Na-O -Si</b>	$\text{SiO}_2 - 49.99; \text{Fe}_2\text{O}_3 - 0.48; \text{MnO} - 0.16; \text{CaO} - 46.19; \text{Na}_2\text{O} - 0.17; \text{K}_2\text{O} - 0.02; \text{H}_2\text{O}(+) - 2.95; \text{H}_2\text{O}(-) - 0.10$ (in wt%)	382
<b>Ca-Fe-H -K -Na-Nb-O -Si-Ti</b>	$\square_4(\text{K}_{1.0}\text{Na}_{0.9})(\text{Ca}_{0.6}\text{Na}_{0.3})\{\text{Ca}_{1.4}(\text{Nb}_{2.7}\text{Ti}_{1.2}\text{Fe}_{0.05})-(\text{Nb}_{2.65}\text{Ti}_{1.3}\text{Fe}_{0.05})[\text{Si}_6\text{O}_{48}](\text{OH}_{4.75}\text{O}_{3.25})\}\cdot 11\text{H}_2\text{O}$	341
<b>Ca-Fe-H -K -Na-O -Si</b>	$(\text{K}_{0.90}\text{Na}_{0.06})(\text{Ca}_{0.58}\text{Na}_{1.36}\text{Fe}^{2+}_{0.06})-(\text{Fe}^{2+}_{3.48}\text{Fe}^{3+}_{1.52})\text{Si}_{7.99}\text{O}_{22}(\text{OH})_2$	278
	$(\text{K}_{0.9}\text{Na}_{0.1})(\text{Ca}_{0.52}\text{Na}_{1.48})(\text{Fe}^{2+}_{3.50}\text{Fe}^{3+}_{1.50})-\text{Si}_{7.99}\text{O}_{22}(\text{OH})_2$	271, 277
	$\text{KNaCaFe}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	271
<b>Ca-Fe-H -K -Na-O -Si-Ti</b>	$\text{NaK}_2(\text{Ca}, \text{Fe}^{2+})_2(\text{Ti}, \text{Fe}^{3+})\text{Si}_7\text{O}_{19}(\text{OH})$	382, 383
<b>Ca-Fe-H -Li-Mg-Mn-Na-O -Si</b>	$(\text{Li}_{0.17}\text{Na}_{0.69})(\text{Mn}_{3.32}\text{Ca}_{0.39}\text{Mg}_{0.19}\text{Fe}_{0.03})-\text{Si}_{5.07}\text{O}_{14.02}(\text{OH})_{0.98}$	405
<b>Ca-Fe-H -Li-Mg-Mn-O -Si</b>	$\text{Ca}_{1.98}\text{Li}_{1.01}\text{Mn}_{1.35}\text{Fe}_{0.56}\text{Mg}_{0.10}\text{H}_{1.00}\text{Si}_{5.00}\text{O}_{15}$	405
<b>Ca-Fe-H -Mg-Mn-Na-O -Si</b>	$\text{Ca}_{2.70}\text{Mn}_{5.86}\text{Na}_{1.60}\text{Fe}_{0.04}\text{Mg}_{0.04}\text{Si}_{9.91}\text{H}_2\text{O}_{30}$	405
<b>Ca-Fe-H -Mg-Mn-O -Si</b>	$\text{Ca}_{0.1}\text{Mn}_{1.9}\text{Mg}_{1.25}\text{Fe}^{2+}_{3.56}\text{Fe}^{3+}_{0.38}\text{Si}_{7.81}\text{O}_{22}(\text{OH})_2$	228
	$\text{Ca}_{0.24}\text{Mn}_{1.57}\text{Mg}_{2.27}\text{Fe}^{2+}_{2.76}\text{Fe}^{3+}_{0.32}\text{Si}_{7.84}\text{O}_{22}(\text{OH})_2$	228
	$\text{Ca}_{0.24}\text{Mn}_{2.41}\text{Mg}_{1.20}\text{Fe}_{2.15}\text{Si}_{8.00}\text{O}_{22}(\text{OH})_2$	270
	$\text{Ca}_{0.24}\text{Mn}_{2.41}\text{Mg}_{4.20}\text{Fe}_{0.15}\text{Si}_8\text{O}_{22}(\text{OH})_2$	228
	$(\text{Ca}_{0.90}\text{Mn}_{4.04}\text{Mg}_{0.05}\text{Fe}^{2+}_{0.01})[\text{Si}_5\text{O}_{14}(\text{OH})](\text{OH})\cdot \text{H}_2\text{O}$	405
	$\text{Ca}_2(\text{Fe}^{2+}, \text{Mn}, \text{Mg})\text{Fe}^{3+}\text{Si}_5\text{O}_{14}\text{OH}$	395
<b>Ca-Fe-H -Mg-Na-O -Si</b>	$\text{CaO} - 33.20, \text{MgO} - 0.12, \text{FeO} - 1.00, \text{Na}_2\text{O} - 9.01, \text{SiO}_2 - 53.80, \text{H}_2\text{O} - 2.94$ (in wt%)	340
	$\text{NaCa}_2\text{Mg}_{5-x}\text{Fe}_x\text{Si}_8\text{O}_{22}(\text{OH})_2$	268
<b>Ca-Fe-H -Mg-O -Si</b>	$\text{Ca}_{1.75}\text{Fe}_{0.65}\text{Mg}_{4.60}\text{Si}_8\text{O}_{22}(\text{OH})_2$	270
	$\text{Ca}_{1.92}\text{Fe}_{0.35}\text{Mg}_{4.73}\text{Si}_8\text{O}_{22}(\text{OH})_2$	270
	$\text{Ca}_{2.00}\text{Fe}_{0.35}\text{Mg}_{4.65}\text{Si}_8\text{O}_{22}(\text{OH})_2$	270
	$\text{Ca}_2(\text{Mg}_{4.95}\text{Fe}^{2+}_{0.05})\text{Si}_{8.00}\text{O}_{22}(\text{OH})_2$	265, 272
	$\text{Ca}_2(\text{Mg}, \text{Fe})_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	232, 253
<b>Ca-Fe-H -Mn-Na-O -Si</b>	$\text{HNaCa}_{1.969}\text{Mn}_{0.045}\text{Fe}_{0.014}\text{Si}_3\text{O}_9$	340
	$(\text{Mn}_{1.26}\text{Fe}_{0.27}\text{Ca}_{2.42})\text{Na}_{2.15}\text{Si}_{5.99}\text{O}_{17}\text{H}_2\text{O}$	340
	$(\text{Mn}_{3.23}\text{Fe}_{0.13}\text{Ca}_{0.65})\text{Na}_{1.98}\text{Si}_{5.99}\text{O}_{17}\text{H}_2\text{O}$	340
<b>Ca-Fe-H -Mn-O -Si</b>	$\text{Ca}_2(\text{Fe}, \text{Mn})\text{FeSi}_5\text{O}_{14}(\text{OH})$	399, 401
<b>Ca-Fe-H -Na-O -Si</b>	$\text{Na}(\text{CaNa})\text{Fe}^{2+}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	257
	$\text{Na}_2\text{CaFe}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	283

Element system	Chemical formula	Page
<b>Ca-Fe-H -O -Sc-Si</b>	$\text{Ca}(\text{Sc},\text{Fe})\text{Si}_3\text{O}_8(\text{OH})$	335
<b>Ca-Fe-H -O -Si</b>	$\square\text{Ca}_2\text{Fe}^{2+}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	256
	$\text{Ca}_{2.35}\text{Fe}_{2.02}\text{Si}_6\text{O}_{18}\text{H}_2 \cdot 4\text{H}_2\text{O}$	360
	$\text{Fe}^{3+}\text{Fe}^{2+}\text{Ca}_2\text{Si}_5\text{O}_{14}(\text{OH})$	404
<b>Ca-Fe-K -Li-Mg-Mn-Na-O -Si-Ti</b>	$\text{SiO}_2 - 52.29, \text{TiO}_2 - 17.35, \text{FeO} - 11.92, \text{MnO} - 2.27, \text{MgO} - 1.55, \text{CaO} - 0.62, \text{K}_2\text{O} - 5.58, \text{Na}_2\text{O} - 6.81, \text{Li}_2\text{O} - 1.63$	465
<b>Ca-Fe-Mg-Mn-O -Si</b>	$\text{Ca}_{0.204}\text{Fe}_{0.22}\text{Mn}_{0.566}\text{Mg}_{0.01}\text{SiO}_3$	118
	$\text{Ca}_{0.94}\text{Mg}_{0.13}\text{Mn}_{1.79}\text{Fe}_{0.13}\text{Si}_3\text{O}_9$	91
	$\text{Ca}_{0.96}\text{Fe}_{0.82}\text{Mg}_{0.19}\text{Mn}_{0.02}\text{Si}_2\text{O}_6$	58, 108, 118
	$\text{Ca}_{0.99}\text{Fe}^{2+}_{0.84}\text{Mg}_{0.12}\text{Mn}_{0.04}\text{Si}_2\text{O}_6$	48, 95, 109, 118
	$\text{CaMgSi}_2\text{O}_6 - \text{CaFeSi}_2\text{O}_6 - \text{CaMnSi}_2\text{O}_6$	61
	$\text{Ca}_{1.49}\text{Mg}_{0.03}\text{Mn}_{1.11}\text{Fe}_{0.36}\text{Si}_3\text{O}_9$	91
	$\text{Ca}_{2.33}\text{Mg}_{0.06}\text{Mn}_{0.36}\text{Fe}_{0.22}\text{Si}_3\text{O}_9$	91
	$\text{Ca}_{2.90}\text{Mg}_{0.03}\text{Mn}_{0.02}\text{Fe}_{0.11}\text{Si}_{2.97}\text{O}_9$	91
	$(\text{Fe}_{0.84}\text{Ca}_{0.13}\text{Mg}_{0.02}\text{Mn}_{0.02})\text{SiO}_3$	89, 123
	$(\text{Mn}_{0.93}\text{Ca}_{0.056}\text{Mg}_{0.01}\text{Fe}_{0.01})\text{SiO}_3$	69
	$(\text{Mn},\text{Fe},\text{Ca},\text{Mg})\text{SiO}_3$	18, 83
	$\text{Mn}_{0.81}\text{Fe}_{0.07}\text{Mg}_{0.06}\text{Ca}_{0.05}\text{SiO}_3$	104
	$\text{Mn}_{0.82}\text{Fe}_{0.07}\text{Mg}_{0.09}\text{Ca}_{0.02}\text{SiO}_3$	104
	$\text{Mn}_{1.040}\text{Mg}_{0.885}\text{Fe}^{2+}_{0.087}\text{Fe}^{3+}_{0.012}\text{Ca}_{0.024}\text{Si}_{1.973}\text{O}_6$	95, 124
	$\text{Mn}_{3.73}\text{Mg}_{0.73}\text{Ca}_{0.51}\text{Fe}_{0.03}\text{Si}_5\text{O}_{15}$	104
<b>Ca-Fe-Mg-Mn-O -Si-Zn</b>	$(\text{Mn}_{0.632}\text{Ca}_{0.21}\text{Zn}_{0.09}\text{Mg}_{0.05}\text{Fe}_{0.02})\text{SiO}_3$	69
<b>Ca-Fe-Mg-Na-O -Sc-Si</b>	$(\text{Na},\text{Ca},\text{Fe})(\text{Sc},\text{Mg},\text{Fe})\text{Si}_2\text{O}_6$	84
	$(\text{Na}_{0.43}\text{Ca}_{0.31}\text{Fe}^{2+}_{0.14}\square_{0.12})(\text{Sc}_{0.66}\text{Fe}^{2+}_{0.15}\text{Mg}_{0.19})\text{Si}_2\text{O}_6$	95
<b>Ca-Fe-Mg-Na-O -Si</b>	$\text{Ca}_{0.96}\text{Na}_{0.02}\text{Mg}_{0.85}\text{Fe}_{0.12}\text{Si}_{1.99}\text{O}_6$	71
	$\text{CaMgSi}_2\text{O}_6 - \text{NaFeSi}_2\text{O}_6$	37, 64
	$\text{Na}_{0.70}\text{Ca}_{0.30}\text{Fe}_{0.84}\text{Mg}_{0.16}\text{Si}_2\text{O}_6$	93
	$\text{Na}_{0.99}\text{Ca}_{0.01}\text{Fe}_{0.99}\text{Mg}_{0.01}\text{Si}_2\text{O}_6$	93
	$\text{NaFeSi}_2\text{O}_6 - \text{CaMgSi}_2\text{O}_6 - \text{CaFeSi}_2\text{O}_6$	38
<b>Ca-Fe-Mg-O -Si</b>	$(\text{Ca},\text{Mg},\text{Fe})_2\text{Si}_2\text{O}_6$	28, 76, 83
	$\text{Ca}_{0.30}\text{Mg}_{0.74}\text{Fe}_{0.96}\text{Si}_2\text{O}_6$	61
	$\text{Ca}_{0.75}\text{Mg}_{0.75}\text{Fe}_{0.50}\text{Si}_2\text{O}_6$	48
	$\text{Ca}_{0.95}\text{Mg}_{0.20}\text{Fe}_{0.85}\text{Si}_2\text{O}_6$	59
	$\text{CaFe}_{1-x}\text{Mg}_x\text{Si}_2\text{O}_6$	46, 48, 56-59, 91, 107, 108, 167
	$\text{CaMg}_{1-x}\text{Fe}^{3+}_x\text{Si}_{2-x}\text{Fe}^{3+}_x\text{O}_6$	25, 60, 168
	$\text{CaMgSi}_2\text{O}_6 - \alpha\text{-Fe}_2\text{O}_3$	60
	$\text{CaMgSi}_2\text{O}_6 - \text{CaFe}^{3+}\text{Fe}^{3+}\text{SiO}_6$	25



Element system	Chemical formula	Page
<b>Ca-Fe-Mg-O -Si (cont.)</b>	$\text{CaMgSi}_2\text{O}_6 - \text{CaFeSi}_2\text{O}_6$	28, 64, 140
	$\text{CaMgSi}_2\text{O}_6 - \text{Fe}_2\text{Si}_2\text{O}_6$	29
	$\text{CaMgSi}_2\text{O}_6 - \text{Mg}_2\text{Si}_2\text{O}_6 - \text{Fe}_2\text{Si}_2\text{O}_6 - \text{CaFeSi}_2\text{O}_6$	31
	$\text{CaSiO}_3 - \text{MgSiO}_3 - \text{FeSiO}_3$	29
	$\text{Ca}_{1.01}\text{Fe}_{0.05}\text{Mg}_{0.94}\text{Si}_2\text{O}_6$	59
	$(\text{Fe,Mg,Ca})\text{SiO}_3$	76, 83
	$\text{Fe}_{1.70}\text{Mg}_{0.26}\text{Ca}_{0.04}\text{Si}_2\text{O}_6$	102
	$\text{Mg}_{0.305}\text{Fe}_{0.68}\text{Ca}_{0.015}\text{SiO}_3$	88, 100
	$\text{Mg}_{0.31}\text{Fe}_{0.67}\text{Ca}_{0.015}\text{SiO}_3$	13, 88
	$\text{Mg}_{0.33}\text{Fe}_{0.57}\text{Ca}_{0.10}\text{SiO}_3$	90
	$\text{Mg}_{0.34}\text{Fe}_{0.56}\text{Ca}_{0.10}\text{SiO}_3$	28
	$\text{Mg}_{0.39}\text{Fe}_{0.52}\text{Ca}_{0.09}\text{SiO}_3$	28, 90
	$\text{Mg}_{0.475}\text{Fe}_{0.475}\text{Ca}_{0.05}\text{SiO}_3$	91
<b>Ca-Fe-Mn-Na-O -Si-Ti</b>	$(\text{Na}_{0.86}\text{Ca}_{0.09})(\text{Fe}^{2+}, \text{Fe}^{3+})_{0.93}\text{Ti}_{0.03}\text{Mn}_{0.03}\text{Si}_2\text{O}_6$	93
<b>Ca-Fe-Mn-O -Si</b>	$\text{Ca}_{0.82}\text{Fe}_{0.15}\text{Mn}_{0.03}\text{SiO}_3$	91
	$\text{Ca}_{0.816}\text{Fe}_{0.152}\text{Mn}_{0.032}\text{SiO}_3$	31, 61, 169
	$\text{Ca}(\text{Fe,Ca,Mn})\text{Si}_2\text{O}_6$	83
	$\text{Ca}_{2.90}\text{Mn}_{0.10}\text{Fe}_{0.02}\text{Si}_{2.99}\text{O}_9$	91
	$(\text{Fe,Mn,Ca})\text{SiO}_3$	17, 83, 401
<b>Ca-Fe-Na-O -Si</b>	$(\text{Na}_{0.99}\text{Ca}_{0.01})(\text{Fe}^{2+}, \text{Fe}^{3+})_{1.0}\text{Si}_2\text{O}_6$	93
	$\text{CaFeSi}_2\text{O}_6 - \text{NaFeSi}_2\text{O}_6$	63, 64
<b>Ca-Fe-Na-O -Si-V</b>	$(\text{Na}_{0.99}\text{Ca}_{0.01})(\text{Fe}^{2+}, \text{Fe}^{3+})_{1.00}\text{Si}_{2.00}\text{O}_6$ including $\text{V}_{0.002}$	118
<b>Ca-Fe-Na-O -Si-Zn</b>	$\text{NaFeSi}_2\text{O}_6 - \text{CaZnSi}_2\text{O}_6$	38
<b>Ca-Fe-O -Si</b>	$\text{CaFeSi}_2\text{O}_6$	25, 32, 46, 48, 56, 58, 59, 73, 83, 90, 98, 107, 108, 112, 138, 139, 150, 151
	$\text{CaFe}_2\text{SiO}_6 - \text{FeSiO}_3$	60
	$\text{CaFe}^{3+}_2\text{SiO}_6$	25
	$\text{Fe}_{0.85}\text{Ca}_{0.15}\text{SiO}_3$	100
<b>Ca-Fe-O -Si-Zn</b>	$\text{CaFeSi}_2\text{O}_6 - \text{CaZnSi}_2\text{O}_6$	32, 141
<b>Ca-Ge-O -Si</b>	$\text{Ca}(\text{Ge,Si})\text{O}_3$	22
<b>Ca-H -Hf-Na-O -Si-Sr-Ti-Zr</b>	$(\text{Na}_{2.03}\text{Ca}_{0.01})(\text{Zr}_{0.76}\text{Sr}_{0.17}\text{Ti}_{0.02}\text{Hf}_{0.01})\text{Si}_{4.02}\text{O}_{11} \cdot 2\text{H}_2\text{O}$	434
<b>Ca-H -K -Mg-Na-Ni-O -Si</b>	$\text{K}(\text{CaNa})\text{Ni}_{5-x}\text{Mg}_x\text{Si}_8\text{O}_{22}(\text{OH})_2$	320
	$\text{K}(\text{CaNa})\text{Mg}_4\text{Ni}[\text{Si}_8\text{O}_{22}](\text{OH})_2 - \text{K}(\text{CaNa})\text{Ni}_5[\text{Si}_8\text{O}_{22}](\text{OH})_2$	254
<b>Ca-H -K -Mg-Na-O -Si</b>	$(\text{K}_x\text{Na}_y\text{□}_{1-x-y})(\text{Na}_{x+y}\text{Ca}_{2-x-y})_2\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	250
	$\text{KNaCaMg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	233, 271
<b>Ca-H -K -Mg-O -Si</b>	$\text{K}(\text{KCa})\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	233, 271

Element system	Chemical formula	Page
<b>Ca-H -K -Mn-Na-O -Si-Ti</b>	$K_2Na(Ca,Mn)_2TiSi_7O_{19}(OH)$	379
<b>Ca-H -K -Na-O -Si-Ti</b>	$Ca_2K_2TiNa[Si_7O_{18}(OH)]O$	374, 382
	$(Na,Ca)_4Ti_4Si_8O_{26}(H_2O,K)_3$	84
<b>Ca-H -K -Na-O -Si-Zr</b>	$(Na,K)_2CaZr_2Si_{10}O_{26} \cdot (5-6) H_2O$	419, 428
<b>Ca-H -K -O -Si</b>	$KCa_5\Box(Si_2O_7)(Si_6O_{15})(OH)F$	419
<b>Ca-H -Li-Mn-Na-O -Si</b>	$(Na,Li)(Mn,Ca)_4Si_5O_{14}(OH)$	396, 401
<b>Ca-H -Li-Mn-O -Si</b>	$LiMn_2Ca_2HSi_5O_{15}$	396, 401
<b>Ca-H -Mg-Mn-Na-O -Si</b>	$(Ca_{0.36}Na_{0.06}Mn_{0.96}Mg_{0.57})Mg_5Si_8O_{22}(OH)_2$	270
	$(Mn_{1.88}Ca_{0.17}Mg_{0.01})Na_{1.0}HSi_{2.97}O_9$	341
<b>Ca-H -Mg-Na-O -Si</b>	$(Ca_{3.99}Na_{0.05}Mg_{0.01})Si_{3.07}O_{12}H_{3.66}$	341
	$Ca_2Mg_5Si_8O_{22}(OH)_2 - Na_2CaMg_5Si_8O_{22}(OH)_2$	235
	$Na_2CaMg_5Si_8O_{22}(OH)_2$	257, 271, 283
<b>Ca-H -Mg-O -Si</b>	$Ca_{1.79}^{[8]}Mg_{0.2}^{[6]}Mg_{5.0}Si_8O_{22}(OH)_2$	281
	$Ca_{1.8}Mg_{5.2}Si_8O_{22}(OH)_2$	247, 249
	$Ca_2Mg_5Si_8O_{22}(OH)_2$	230, 251, 256, 270
<b>Ca-H -Mn-Na-O -Si</b>	$(Mn_{2.00}Ca_{0.03})NaHSi_3O_9$	337, 340
	$Na(Mn,Ca)_2Si_3O_8(OH)$	335
	$NaCaMn_3Si_5O_{14}(OH)$	396, 401
<b>Ca-H -Mn-O -Si</b>	$CaMn_4Si_5O_{14}(OH)_2 \cdot H_2O$	396, 401
	$CaMn_6Si_3O_{16} \cdot 7H_2O$	396, 401
	$Ca_2Mn_7Si_{10}O_{28}(OH)_2 \cdot 5H_2O$	396, 401, 405
<b>Ca-H -Na-O -Si</b>	$NaCa_2Si_3O_8(OH)$	332, 335
<b>Ca-H -O -Sc-Si</b>	$CaScSi_3O_8(OH)$	333, 337
<b>Ca-H -O -Si</b>	$CaO-SiO_2-H_2O$ system	355
	$Ca_{2.25}[Si_3O_{7.5}(OH)_{1.5}] \cdot 1H_2O$	356, 359
	$Ca_3Si_6O_{15} \cdot 7H_2O$	348, 353, 356, 360
	$Ca_4(Si_3O_9)(OH)_2$	333, 335, 341
	$Ca_4Si_3O_{10} \cdot 2H_2O$	333, 335
	$Ca_4Si_6O_{15}(OH)_2 \cdot 5H_2O$	351, 359
	$Ca_{4.5}Si_6O_{15}(OH)_3 \cdot xH_2O$	351, 359
	$Ca_{4.5}Si_6O_{16}(OH) \cdot 5H_2O$	351, 359
	$Ca_5Si_6O_{16}(OH)_2$	359
	$Ca_5[Si_6O_{16}(OH)_2] \cdot xH_2O$	356, 359
	$Ca_5Si_6(O,OH)_{18} \cdot 5H_2O$	349, 359
	$Ca_5Si_6O_{17} \cdot 5H_2O$	360
	$Ca_6Si_6O_{17}(OH)_2$	371, 379
	$Ca_9(Si_6O_{15})_3 \cdot 18H_2O$	352, 360
	$Ca_9Si_6O_{16}(OH)_{10} \cdot 6H_2O$	351

Element system	Chemical formula	Page
<b>Ca-H -O -Si (cont.)</b>	$\text{Ca}_{10}\text{Si}_{18}\text{O}_{46} \cdot 18\text{H}_2\text{O}$	348, 352, 356, 360
<b>Ca-H -O -Si-Sn</b>	$\text{CaSnSi}_3\text{O}_9 \cdot 2\text{H}_2\text{O}$	401
<b>Ca-H -O -Si-Zr</b>	$\text{CaZrSi}_6\text{O}_{15} \cdot 2.5\text{H}_2\text{O}$	373, 374, 379, 382, 385
<b>Ca-M -Mg-Na-O -Si</b>	$\text{CaMgSi}_2\text{O}_6 - \text{NaMSi}_2\text{O}_6$ (M = Fe, Al)	37
<b>Ca-M -O -Si</b>	$\text{CaM}^{2+}\text{Si}_2\text{O}_6$ ( $\text{M}^{2+} = \text{Mg}^{2+}, \text{Fe}^{2+}, \text{Co}^{2+}, \text{Ni}^{2+}$ )	26
	$\text{CaMSiO}_6$ (M = Sc, Co, Ni)	83
<b>Ca-Mg-Mn-O -Si</b>	$\text{Ca}_{0.43}\text{Mn}_{0.69}\text{Mg}_{0.82}\text{Si}_2\text{O}_6$	18, 105
	$\text{CaMgSi}_2\text{O}_6 \cdot \text{Mn}^{2+}$	67
	$\text{Mg}_{1.41}\text{Mn}_{0.56}\text{Ca}_{0.03}\text{Si}_2\text{O}_6$	89, 124
	$\text{Mg}_{1.43}\text{Mn}_{0.54}\text{Ca}_{0.03}\text{Si}_2\text{O}_6$	18, 89
	$\text{Mg}_{1.562}\text{Mn}_{0.175}\text{Ca}_{0.263}\text{Si}_2\text{O}_6$	89
	$\text{Mn}_{0.75}\text{Mg}_{0.15}\text{Ca}_{0.10}\text{SiO}_3$	104
	$\text{Mn}_{0.97}\text{Mg}_{0.02}\text{Ca}_{0.01}\text{SiO}_3$	104
<b>Ca-Mg-Na-O -Sc-Si</b>	$\text{NaScSi}_2\text{O}_6 - \text{CaMgSiO}_6$	38
<b>Ca-Mg-Na-O -Si</b>	$(\text{Na}_{0.56}\text{Ca}_{0.36}\text{Mg}_{0.08})\text{Si}_{0.27}\text{Mg}_{0.73}\text{Si}_2\text{O}_6$	34, 93
<b>Ca-Mg-Ni-O -Si</b>	$\text{CaMg}_{1-x}\text{Ni}_x\text{Si}_2\text{O}_6$	80, 103
	$\text{CaMgSi}_2\text{O}_6 - \text{CaNiSi}_2\text{O}_6$	32
<b>Ca-Mg-O -Si</b>	$\text{Ca}_{0.15}\text{Mg}_{1.85}\text{Si}_2\text{O}_6$	91, 27
	$\text{Ca}_{0.5}\text{Mg}_{0.5}\text{SiO}_3$	30
	$\text{Ca}_{0.5}\text{Mg}_{1.5}\text{Si}_2\text{O}_6$	21, 27, 140
	$\text{Ca}_{0.59}\text{Mg}_{1.41}\text{Si}_2\text{O}_6$	27
	$\text{Ca}_{0.66}\text{Mg}_{1.34}\text{Si}_2\text{O}_6$	26
	$\text{Ca}_{0.80}\text{Mg}_{1.20}\text{Si}_{1.99}\text{O}_6$	91
	$\text{Ca}_{0.8}\text{Mg}_{1.2}\text{Si}_2\text{O}_6$	23, 26, 27, 97
	$\text{CaMgSi}_2\text{O}_6$	23, 30-32, 37, 38, 60, 67, 69, 72, 83, 90, 98, 99, 101, 103, 119, 121, 122, 138
	$\text{CaMgSi}_2\text{O}_6 - \text{Mg}_2\text{Si}_2\text{O}_6$	26, 29, 139
<b>Ca-Mg-O -Si-Sr</b>	$\text{Ca}_{1-x}\text{Sr}_x\text{MgSi}_2\text{O}_6$	24
<b>Ca-Mn-O -Pb-Si</b>	$\text{CaSiO}_3 \cdot \text{Pb}^{2+}, \text{Mn}^{2+}$	81
<b>Ca-Mn-O -Si</b>	$\text{CaMnSi}_2\text{O}_6$	26, 46, 83, 91
<b>Ca-Mn-O -Zn</b>	$\text{Ca}_{0.2}\text{Zn}_{0.2}\text{Mn}_{0.6}\text{O}_3$	397
	$\text{CaZnMn}_3\text{O}_{15}$	397
<b>Ca-Na-Ni-O -Sc-Si</b>	$\text{NaScSi}_2\text{O}_6 - \text{CaNiSi}_2\text{O}_6$	38
<b>Ca-Na-O -Sc-Si-Zn</b>	$\text{NaScSi}_2\text{O}_6 - \text{CaZnSi}_2\text{O}_6$	38
<b>Ca-Ni-O -Si</b>	$\text{CaNiSi}_2\text{O}_6$	26, 49, 69, 91, 103, 108, 173
<b>Ca-O -Pb-Si</b>	$\text{Ca}_{1-x}\text{Pb}_x\text{SiO}_3$	81, 122, 123
	$\text{CaSiO}_3 \cdot \text{Pb}^{2+}$	81, 122

Element system	Chemical formula	Page
<b>Ca-O -Si</b>	CaSiO <sub>3</sub>	10, 20-23, 25, 30, 44, 66, 69, 75, 83, 86, 89, 90, 96-98, 119, 120, 122, 177, 333
	CaSi <sub>2</sub> O <sub>5</sub>	9
	Ca <sub>2</sub> SiO <sub>4</sub> + CaSi <sub>2</sub> O <sub>5</sub>	21
	Ca <sub>3</sub> [Si <sub>3</sub> O <sub>9</sub> ]	90
<b>Ca-O -Si-Sr</b>	CaSiO <sub>3</sub> – SrSiO <sub>3</sub>	22
<b>Ca-O -Si-Ti</b>	Ca(Ti,Si)O <sub>3</sub>	22
	CaTi <sub>0.51</sub> Si <sub>0.49</sub> O <sub>3</sub>	90, 97
	CaTi <sub>0.77</sub> Si <sub>0.23</sub> O <sub>3</sub>	90, 97
	CaTiO <sub>3</sub> – CaSiO <sub>3</sub>	22, 30
<b>Ca-O -Si-Zn</b>	CaZnSi <sub>2</sub> O <sub>6</sub>	31, 32, 83, 91, 92
<b>Ca-O -Si-Zr</b>	CaZrSi <sub>6</sub> O <sub>15</sub>	376
<b>Ca-O -Ti</b>	CaTiO <sub>3</sub>	30
<b>CaTs-Di</b>	Di <sub>x</sub> CaTs <sub>1-x</sub> (Di: Diopside, CaTs: Calcium Tschermak's)	94, 119, 120
<b>CaTs-Di-En</b>	Di <sub>x</sub> En <sub>y</sub> CaTs <sub>1-x-y</sub> (Di: Diopside, En: Enstatite, CaTs: Calcium Tschermak's)	27, 94, 101
<b>Cd-Ga-O -Si</b>	Cd <sub>7</sub> [Ga <sub>6</sub> Si]O <sub>21</sub>	120
<b>Cd-Ge-O -Si</b>	Cd <sub>7</sub> [Ge <sub>6</sub> Si]O <sub>7</sub>	66
<b>Cd-O -Si</b>	CdSiO <sub>3</sub>	44, 66, 81, 84, 120
<b>Cd-O -Si-Sm</b>	Cd <sub>1-x</sub> Sm <sub>x</sub> SiO <sub>3</sub>	81
	CdSiO <sub>3</sub> : Sm <sup>3+</sup>	81
<b>Ce-H -Na-O -Si</b>	Na <sub>2</sub> Ce[Si <sub>6</sub> O <sub>14</sub> (OH)]·nH <sub>2</sub> O	374, 375, 379
	Na <sub>2</sub> HCeSi <sub>6</sub> O <sub>15</sub> ·1.5H <sub>2</sub> O	382
	Na <sub>3</sub> CeSi <sub>6</sub> O <sub>15</sub> ·6H <sub>2</sub> O	382, 383
<b>Ce-K -O -Si</b>	K <sub>2</sub> CeSi <sub>6</sub> O <sub>15</sub>	374-377, 379, 382
<b>Co-Cs-O -Si</b>	Cs <sub>5</sub> CoSiO <sub>6</sub>	44, 82, 84, 94
<b>Co-Li-Mg-O -Sc-Si</b>	LiScSi <sub>2</sub> O <sub>6</sub> – MgSiO <sub>3</sub> – CoSiO <sub>3</sub>	43
	Mg <sub>0.7</sub> Co <sub>0.1</sub> Li <sub>0.1</sub> Sc <sub>0.1</sub> SiO <sub>3</sub>	44, 88
<b>Co-Mg-Mn-O -Si</b>	(Mg,Co,Mn)SiO <sub>3</sub>	19
	Mg <sub>1.562</sub> Mn <sub>0.175</sub> Co <sub>0.263</sub> Si <sub>2</sub> O <sub>6</sub>	19
<b>Co-Mg-O -Si</b>	(Mg,Co)SiO <sub>3</sub>	19
	Co <sub>x</sub> Mg <sub>2-x</sub> Si <sub>2</sub> O <sub>6</sub>	102
	Mg <sub>1-x</sub> Co <sub>x</sub> SiO <sub>3</sub>	79, 88
<b>Co-Na-O -Si</b>	Na <sub>2</sub> CoSi <sub>4</sub> O <sub>10</sub>	417, 423, 428, 429, 432, 434, 447
<b>Co-Ni-O -Si-Zn</b>	(Co,Ni,Zn)SiO <sub>3</sub>	19
	Co <sub>1/3</sub> Ni <sub>1/3</sub> Zn <sub>1/3</sub> SiO <sub>3</sub>	89, 102

Element system	Chemical formula	Page
<b>Co-O -Si</b>	CoSiO <sub>3</sub>	13, 84
	Co <sub>2</sub> SiO <sub>4</sub>	13
	Co <sub>2</sub> Si <sub>2</sub> O <sub>6</sub>	88, 101
<b>Cr-Fe-Na-O -Si</b>	NaFeSi <sub>2</sub> O <sub>6</sub> – NaCrSi <sub>2</sub> O <sub>6</sub>	64
<b>Cr-Li-O -Si</b>	LiCrSi <sub>2</sub> O <sub>6</sub>	40-42, 51, 94, 109
<b>Cr-Mg-Na-O -Si</b>	NaMg <sub>2</sub> CrSi <sub>3</sub> O <sub>10</sub>	335, 340, 341
	Na <sub>2</sub> Mg <sub>4</sub> Cr <sub>2</sub> (Si <sub>6</sub> O <sub>18</sub> )O <sub>2</sub>	340
	Na <sub>4</sub> (Mg <sub>2</sub> Cr <sub>4</sub> )Si <sub>12</sub> O <sub>40</sub>	340
<b>Cr-Mg-O -Si</b>	CrMgSi <sub>2</sub> O <sub>6</sub>	19, 83
	Mg <sub>1.425</sub> Cr <sub>0.611</sub> Si <sub>1.964</sub> O <sub>6</sub>	17, 88
	Mg <sub>1-x</sub> Cr <sub>x</sub> SiO <sub>3</sub>	17
<b>Cr-Na-O -Sc-Si</b>	NaCr <sub>x</sub> Sc <sub>1-x</sub> Si <sub>2</sub> O <sub>6</sub>	93
	NaScSi <sub>2</sub> O <sub>6</sub> – NaCrSi <sub>2</sub> O <sub>6</sub>	34, 81
<b>Cr-Na-O -Si</b>	NaCrSi <sub>2</sub> O <sub>6</sub>	34, 37, 38, 51, 81, 84, 92, 93, 109, 123, 155
<b>Cr-Na-O -Si-V</b>	Na(V,Cr)Si <sub>2</sub> O <sub>6</sub>	34, 84
<b>Cs-F -Fe-H -K -Li-Mn-Na-Nb-O -Si-Ti</b>	(Cs,K) <sub>2</sub> Na(Mn,Fe,Li) <sub>7</sub> (Ti,Nb) <sub>2</sub> Si <sub>8</sub> O <sub>26</sub> (OH) <sub>4</sub> F	459
<b>Cs-O -Si-Ti</b>	Cs <sub>2</sub> TiSi <sub>6</sub> O <sub>15</sub>	374, 377, 379, 382
<b>Cs-O -Si-Zr</b>	Cs <sub>2</sub> ZrSi <sub>6</sub> O <sub>15</sub>	374, 376
<b>Cu-Ge-O</b>	CuGeO <sub>3</sub>	21
<b>Cu-H -Na-O -Si</b>	Na <sub>2</sub> Cu <sub>2</sub> Si <sub>4</sub> O <sub>11</sub> ·2H <sub>2</sub> O	418, 424, 427, 428, 439, 444, 448
<b>Cu-H -O -Si</b>	Cu <sub>5</sub> (SiO <sub>3</sub> ) <sub>4</sub> (OH) <sub>2</sub>	212, 213
	Cu <sub>5</sub> Si <sub>6</sub> O <sub>17</sub> ·7H <sub>2</sub> O	210, 212, 213
	Cu <sub>8</sub> (Si <sub>4</sub> O <sub>11</sub> ) <sub>2</sub> (OH) <sub>4</sub> ·xH <sub>2</sub> O	212, 213
	Cu <sub>9</sub> Si <sub>10</sub> O <sub>29</sub> ·11H <sub>2</sub> O	210, 212, 213
<b>Cu-K -Na-O -Si</b>	KNaCuSi <sub>4</sub> O <sub>10</sub>	417, 428, 429, 433
<b>Cu-Mg-O -Si</b>	(Mg,Cu)SiO <sub>3</sub>	19
	Mg(Cu,Mg)Si <sub>2</sub> O <sub>6</sub>	19, 106
	Mg(Cu <sub>0.56</sub> Mg <sub>0.44</sub> )Si <sub>2</sub> O <sub>6</sub>	19, 88
<b>Cu-Na-O -Si</b>	Cu <sub>3</sub> Na <sub>2</sub> (Si <sub>4</sub> O <sub>12</sub> )	423, 428, 433, 443
	Na <sub>2</sub> CuSi <sub>4</sub> O <sub>10</sub>	417, 418, 428
	Na <sub>2</sub> Cu <sub>2</sub> Si <sub>4</sub> O <sub>11</sub>	418, 424, 427, 428, 439, 444, 448
<b>Cu-O -Si</b>	CuSi <sub>2</sub> O <sub>6</sub>	33
<b>Di-En</b>	Di <sub>x</sub> En <sub>1-x</sub> (Di: Diopside, En: Enstatite)	27-29, 101
	Di <sub>40</sub> En <sub>60</sub> –Di <sub>60</sub> En <sub>40</sub> (Di: Diopside, En: Enstatite)	27
	Di <sub>50</sub> En <sub>50</sub> –Di <sub>60</sub> En <sub>40</sub> (Di: Diopside, En: Enstatite)	27
<b>Di-Hd</b>	Hd <sub>0.60</sub> Di <sub>0.40</sub> (Hd: Hedenbergite, Di: Diopside)	97, 98

Element system	Chemical formula	Page
<b>Di-Hd-Jd-Ko-MgTs</b>	$\text{Di}_{72}\text{Hd}_9\text{Jd}_3\text{Ko}_3\text{MgTs}_{12}$ (Di: Diopside, Hd: Hedenbergite, Jd: Jadeite, Ko: Kosmochlor, MgTs: Magnesium tschermakite)	97, 99
<b>Di-Hd-Jo</b>	$\text{Hd}_{0.84}\text{Di}_{0.12}\text{Jo}_{0.04}$ (Hd: Hedenbergite, Di: Diopside, Jo: Johannsenite)	61, 94, 108
<b>Di-Hd-Ko-X</b>	$\text{Di}_{93}\text{Hd}_3\text{Ko}_2\text{X}_2$ (Hd: Hedenbergite, Di: Diopside, Jo: Johannsenite, X: is unknown)	24
<b>Di-Jd</b>	$\text{Di}_x\text{Jd}_{1-x}$ (Di: Diopside, Jd: Jadeite)	35, 93
	$\text{Di}_{40}\text{Jd}_{60} - \text{Di}_{20}\text{Jd}_{80}$ (Di: Diopside, Jd: Jadeite)	37
	$\text{Di}_{60}\text{Jd}_{40} - \text{Di}_{40}\text{Jd}_{60}$ (Di: Diopside, Jd: Jadeite)	37
<b>En-Es-Wo</b>	$\text{Wo}_{0.43}\text{En}_{0.46}\text{Es}_{0.11}$ (Wo: Wollastonite, En: Enstatite, Es: Esseneite)	106
<b>En-Fe-Wo</b>	$\text{En}_{0.47}\text{Fe}_{0.27}\text{Wo}_{0.26}$ (En: Enstatite, Wo: Wollastonite)	177
<b>En-Fs</b>	$\text{En}_{0.5}\text{Fs}_{0.5}$ (En: Enstatite, Fs: Ferrosilite)	68
	$\text{En}_{90}\text{Fs}_{10}$ (En: Enstatite, Fs: Ferrosilite)	16
<b>En-Fs-Wo</b>	$\text{En}_{0.39}\text{Fs}_{0.52}\text{Wo}_{0.09}$ (En: Enstatite, Fs: Ferrosilite, Wo: Wollastonite)	91
	$\text{En}_{0.45}\text{Fs}_{0.04}\text{Wo}_{0.50}$ (En: Enstatite, Fs: Ferrosilite, Wo: Wollastonite)	177
	$\text{En}_{32}\text{Fs}_{66}\text{Wo}_2$ (En: Enstatite, Fs: Ferrosilite, Wo: Wollastonite)	28
	$\text{En}_{47}\text{Fs}_{43}\text{Wo}_{10}$ (En: Enstatite, Fs: Ferrosilite, Wo: Wollastonite)	28
	$\text{En}_{47}\text{Fs}_{44}\text{Wo}_9$ (En: Enstatite, Fs: Ferrosilite, Wo: Wollastonite)	29
<b>En-NaPx</b>	$\text{NaPx}_{16}\text{En}_{84}$ (Px: Pyroxene, En: Enstatite)	34, 93
<b>En-Wo</b>	$\text{En}_{92}\text{Wo}_8$ (En: Enstatite, Wo: Wollastonite)	28
<b>Eu-O -Si-Sr</b>	$\text{SrSiO}_3$ : $\text{Eu}^{2+}$	123
<b>F -Fe-H -Hf-K -Na-O -Si-Ti-Zr</b>	$(\text{K}_{2.02}\text{Na}_{0.02})(\text{Zr}_{0.77}\text{Ti}_{0.18}\text{Hf}_{0.01}\text{Fe}_{0.01})\text{Si}_{3.00}\text{H}_{2.38}\text{F}_{0.45}\text{O}_{9.92}$	341
<b>F -Fe-H -K -Mn-Na-Nb-O -Si-Ti</b>	$\text{K}_2\text{Na}(\text{Fe}^{2+}, \text{Mn})_7(\text{Nb}, \text{Ti})_2\text{Si}_8\text{O}_{26}(\text{OH})_4(\text{F}, \text{O})$	455, 459
<b>F -Fe-H -K -Mn-Na-Nb-O -Si-Ti-Zr</b>	$\text{K}_2\text{Na}(\text{Mn}, \text{Fe}^{2+})_7(\text{Nb}, \text{Zr}, \text{Ti})_2\text{Si}_8\text{O}_{26}(\text{OH})_4(\text{O}, \text{F})$	459
<b>F -Fe-H -K -Mn-Na-O -Si</b>	$(\text{K}, \text{Na})_4(\text{Fe}^{2+}, \text{Mn})_2(\text{Si}_4\text{O}_{10})_2(\text{OH}, \text{F})$	434
<b>F -Fe-H -K -Mn-Na-O -Si-Ti</b>	$\text{K}_2\text{Na}(\text{Fe}^{2+}, \text{Mn})_7\text{Ti}_2\text{Si}_8\text{O}_{26}(\text{OH})_4\text{F}$	459
<b>F -Fe-H -Na-O -Si</b>	$\text{Na}_2\text{Fe}_5\text{Si}_8\text{O}_{22}(\text{OH}, \text{F})_2$	239, 273, 301
<b>F -Fe-Na-O -Si-Ti</b>	$\text{Na}_2(\text{Ti}, \text{Fe})\text{Si}_4(\text{O}, \text{F})_{11}$	421, 428
<b>F -Ga-Mg-Na-O -Si</b>	$\text{Na}_{0.2}\text{Mg}_{4.8}\text{Ga}_{0.6}\text{Si}_{7.6}\text{O}_{22}\text{F}_2$	281
<b>F -Li-Mg-Na-O -Si</b>	$\text{Li}_{0.64}\text{Na}_{0.05}\text{Li}_{0.48}\text{Mg}_{1.52}\text{Mg}_{5.00}\text{Si}_{7.93}\text{O}_{21.91}\text{F}_{2.09}$	263, 283
<b>F -Mg-Na-O -Si</b>	$\text{Na}_{1.97}\text{Mg}_{6.01}\text{Si}_{7.97}\text{O}_{22}\text{F}_{1.96}$	271

Element system	Chemical formula	Page
<b>Fe-H -Hf-K -Na-O -Si-Ti-Zr</b>	$(K_{2.92}Na_{0.03})(Zr_{2.02}Hf_{0.01}Ti_{0.10}Fe_{0.01})H_{0.94}Si_{5.89}-O_{18} \cdot 7.34H_2O$	341
<b>Fe-H -K -Mg-Mn-Na-O -Si-Ti</b>	$K_2Na[Na(Fe,Mn)_4Mg_2]Ti_2Si_8O_{26}(OH)_4\Box$	459
<b>Fe-H -K -Mn-Na-Nb-O -Si-Sn-Ti-Zr</b>	$(K_{1.8}Na_{1.2})(Fe_{6.3}Mn_{0.7})(Ti_{1.6}Nb_{0.2}Zr_{0.1}Sn_{0.1})Si_8-(O,OH)_{31}$	466
<b>Fe-H -K -Mn-Na-O -Si-Ti-Zn</b>	$Na_{0.47}K_{0.45}Fe^{2+}_{2.81}Fe^{3+}_{2.21}Mn_{0.22}Zn_{0.23}Ti_{0.18}Si_{7.80}-O_{22}(OH)_2$	273, 277
<b>Fe-H -K -Na-O -Si</b>	$(Na,K)Fe^{2+}Fe^{3+}Si_6O_{15} \cdot 0.5H_2O$	376
<b>Fe-H -Li-Mg-Mn-O -Si</b>	$\Box(Mg,Fe^{2+},Mn,Li)_7Si_8O_{22}(OH)_2$	220
	$\Box(Mg,Fe^{2+},Mn,Li)_2Mg_5Si_8O_{22}(OH)_2$	226
<b>Fe-H -Li-Mg-Na-O -Si</b>	$NaLi_2(Fe^{3+}_2Mg_2Li)Si_8O_{22}(OH)_2$	230, 284
	$Na(LiNa)(Fe^{3+}_2Mg_2Li)Si_8O_{22}(OH)_2$	229, 230, 237
	${}^A\Box{}^B(Na,Li) {}^C(Mg_3Fe^{3+}_2)Si_8O_{22}(OH)_2$	230, 237
	$NaNa_2(Mg_2Fe^{3+}_2Li)Si_8O_{22}(OH)_2$	229, 236, 258
<b>Fe-H -Li-Mg-O -Si</b>	${}^A\Box{}^BLi {}^C(Mg_3Fe^{3+}_2)Si_{8.00}O_{22}(OH)_2$	230, 241, 270
	$Li_2(Fe^{2+},Mg)_3Fe^{3+}_2Si_8O_{22}(OH)_2$	230
	${}^ALi_{0.19} {}^B(Li_{1.26}Fe^{2+}_{0.45}Mg_{0.29})(Mg_{3.31}Fe^{2+}_{0.62}-Fe^{3+}_{1.07})Si_8O_{22}(OH)_2$	277
<b>Fe-H -Li-Na-O -Si</b>	$NaNa_2(Fe^{2+}_2Fe^{3+}_2Li)Si_8O_{22}(OH)_2$	258
<b>Fe-H -Li-O -Si</b>	$\Box Li_2Fe^{2+}_3Fe^{3+}_2Si_8O_{22}(OH)_2$	235, 277
<b>Fe-H -Mg-Mn-O -Si</b>	$(Fe_{0.30}Mn_{0.70})_2(Fe_{0.82}Mg_{0.18})_5(Si_4O_{11})_2(OH)_2$	269, 283
	$(Fe_{0.80}Mn_{0.20})_2(Fe_{0.98}Mg_{0.02})_5(Si_4O_{11})_2(OH)_2$	269, 283
<b>Fe-H -Mg-Na-O -Si</b>	$\Box Na_2(Mg_3Fe^{3+}_2)Si_8O_{22}(OH)_2$	257
	$Na_{1.86}Fe^{2+}_{2.65}Fe^{3+}_{2.25}Mg_{0.60}Si_{7.72}O_{22}(OH)_2$	273, 278
	$NaNa_2(Mg_4Fe^{3+})Si_8O_{22}(OH)_2$	235, 257
<b>Fe-H -Mg-O -Si</b>	$(Fe_xMg_{1-x})_7Si_8O_{22}(OH)_2$	225, 238, 239, 241, 247, 269, 272, 277, 292, 299, 303, 309
	$(Mg,Fe)_5Si_6O_{16}(OH)_2$	394, 401
	$(Mg,Fe)_7Si_8O_{22}(OH)_2$	226, 227, 239, 265
	$Mg_7Si_8O_{22}(OH)_2 - Fe_7Si_8O_{22}(OH)_2$	225
	$(Mg,Fe)_{17}Si_{20}O_{54}(OH)_6$	401
<b>Fe-H -Mn-O -Si</b>	$Fe^{2+}_6Fe^{3+}_3O_3[Si_6O_{17}](OH)_5$ with 3.4 wt % MnO	434
<b>Fe-H -Na-Nb-O -Si-Ti</b>	$Na_{4.04}(Ti_{1.93}Nb_{0.05}Fe_{0.02})Si_{7.99}O_{22} \cdot 4H_2O$	434
<b>Fe-H -Na-O -Si</b>	$\Box Na_2Fe^{2+}_3Fe^{3+}_2Si_8O_{22}(OH)_2$	235, 257, 277
	$NaNa_2(Fe^{2+}_4Fe^{3+})Si_8O_{22}(OH)_2$	257, 273
<b>Fe-H -O -Si</b>	$\Box Fe^{2+}_7Si_8O_{22}(OH)_2$	228, 256
	$Fe^{2+}_6Fe^{3+}_3O_3[Si_6O_{17}](OH)_5$	422

Element system	Chemical formula	Page
<b>Fe-H -O -Si-Sr-Ti</b>	SiO <sub>2</sub> – 34.79; TiO <sub>2</sub> – 10.27; Fe <sub>2</sub> O <sub>3</sub> – 0.20; SrO – 47.37; H <sub>2</sub> O <sup>+</sup> – 6.68 (in wt%)	434
	Sr <sub>3</sub> (Ti,Fe <sup>3+</sup> )(O,OH)(Si <sub>2</sub> O <sub>6</sub> ) <sub>2</sub> ·2...3H <sub>2</sub> O	423, 428
<b>Fe-K -Li-Mg-Mn-Na-O -Si-Ti</b>	KNa <sub>2</sub> Li(Fe,Mg,Mn) <sub>2</sub> Ti <sub>2</sub> Si <sub>8</sub> O <sub>24</sub>	451, 459
	Li <sub>0.93</sub> Na <sub>2.00</sub> K <sub>0.95</sub> Fe <sub>1.60</sub> Mg <sub>0.30</sub> Mn <sub>0.10</sub> Ti <sub>2.0</sub> Si <sub>8.03</sub> O <sub>24</sub>	466
	Na <sub>2.1</sub> Li <sub>0.6</sub> K <sub>0.9</sub> Fe <sub>1.45</sub> Mg <sub>0.38</sub> Mn <sub>0.18</sub> Ti <sub>2.0</sub> Si <sub>8</sub> O <sub>24</sub>	465
<b>Fe-K -Li-Mn-Na-O -Si-Ti</b>	KNa <sub>2</sub> Li(Mn,Fe) <sub>2</sub> Ti <sub>2</sub> Si <sub>8</sub> O <sub>24</sub>	459
<b>Fe-K -Li-Na-O -Si-Ti</b>	KNa <sub>2</sub> LiFe <sub>2</sub> Ti <sub>2</sub> Si <sub>8</sub> O <sub>24</sub>	457
<b>Fe-K -Mg-Na-O -Si-Ti</b>	K <sub>1.98</sub> Ti <sub>1.01</sub> Si <sub>6.01</sub> O <sub>15.03</sub> (with not determined Mg, Fe and Na content)	382
<b>Fe-K -Na-O -Si</b>	(Na,K)Fe <sub>2</sub> Si <sub>6</sub> O <sub>15</sub>	397, 401
	KNaFeSi <sub>4</sub> O <sub>10</sub>	417, 428, 433
<b>Fe-Li-Mg-O -Si</b>	Li <sub>0.85</sub> Fe <sub>0.91</sub> Mg <sub>0.24</sub> Si <sub>2</sub> O <sub>6</sub>	42, 94, 103, 148
<b>Fe-Li-Na-O -Si</b>	Li <sub>1-x</sub> Na <sub>x</sub> FeSiO <sub>4</sub>	145
	Li <sub>x</sub> Na <sub>1-x</sub> FeSi <sub>2</sub> O <sub>6</sub>	41
	NaFeSi <sub>2</sub> O <sub>6</sub> – LiFeSi <sub>2</sub> O <sub>6</sub>	64
	Na <sub>2</sub> LiFeSi <sub>6</sub> O <sub>15</sub>	376, 397, 401, 405
<b>Fe-Li-O -Si</b>	LiFeSi <sub>2</sub> O <sub>6</sub>	40-42, 47, 50, 64, 77, 94, 107, 108, 117, 151, 155, 170
<b>Fe-Mg-Na-O -Si-Ti</b>	NaNa <sub>2</sub> (Mg <sub>3</sub> Fe <sup>3+</sup> Ti)Si <sub>8</sub> O <sub>22</sub> O <sub>2</sub>	235, 257, 284
<b>Fe-Mg-O -Si</b>	(Fe,Mg) <sub>2</sub> (SiO <sub>3</sub> ) <sub>2</sub>	83
	(Fe,Mg)SiO <sub>3</sub>	9, 16, 19, 55, 83, 96, 98, 106
	(Fe <sub>x</sub> Mg <sub>1-x</sub> ) <sub>2</sub> Si <sub>2</sub> O <sub>6</sub>	6, 15, 53, 79, 88, 102, 133
	(Fe <sub>0.008</sub> Mg <sub>0.992</sub> )M <sub>1</sub> (Fe <sub>0.132</sub> Mg <sub>0.868</sub> )M <sub>2</sub> Si <sub>2</sub> O <sub>6</sub>	53
	Fe <sub>x</sub> Mg <sub>1-x</sub> SiO <sub>3</sub>	13-16, 20, 46-48, 52-56, 68, 70, 72, 73, 76, 78, 79, 85, 88, 96, 99-101, 107-112, 121, 132, 133, 151, 152, 157-163, 172, 175, 177, 178, 184
	Mg <sub>2</sub> Si <sub>2</sub> O <sub>6</sub> – Fe <sub>2</sub> Si <sub>2</sub> O <sub>6</sub>	72, 178
	MgO – FeO – SiO <sub>2</sub>	16
	MgSiO <sub>3</sub> – FeSiO <sub>3</sub>	16, 134
<b>Fe-Mn-Na-Nb-O -Si-Ti</b>	Na <sub>1.99</sub> (Ti <sub>0.99</sub> Mn <sub>0.01</sub> Fe <sub>0.01</sub> Nb <sub>0.01</sub> )Si <sub>1.01</sub> O <sub>5</sub>	466
<b>Fe-Mn-O -Si</b>	Mn <sub>1-x</sub> Fe <sub>x</sub> SiO <sub>3</sub>	18
<b>Fe-Na-O -Si</b>	NaFeSi <sub>2</sub> O <sub>6</sub>	33, 35, 38, 41, 47, 49, 50, 62, 77, 84, 92, 107, 108, 116, 139, 155
<b>Fe-Na-O -Si-Ti</b>	Na <sub>2</sub> Fe <sub>5</sub> TiSi <sub>6</sub> O <sub>20</sub>	331, 335



Element system	Chemical formula	Page
<b>Fe-O -Si</b>	$\text{Fe}_{0.88}\text{Si}_{0.12}\text{SiO}_3$	20
	$\text{FeSiO}_3$	8, 12, 47, 53, 85, 88, 96, 100, 108-111, 121, 157-159, 161
	$\text{Fe}_2\text{SiO}_4$	13
	$\text{Fe}_2\text{Si}_2\text{O}_6$	46, 83, 85, 88, 101, 107, 130, 150, 184
<b>Fs-Wo</b>	$\text{Fs}_x\text{Wo}_{1-x}$ (Fs: Ferrosilite, Wo: Wollastonite)	31, 91
<b>Ga-Li-Na-O -Si</b>	$\text{Li}_x\text{Na}_{1-x}\text{GaSi}_2\text{O}_6$	95
	$\text{LiGaSi}_2\text{O}_6 - \text{NaGaSi}_2\text{O}_6$	43
<b>Ga-Li-O -Si</b>	$\text{LiGaSi}_2\text{O}_6$	41, 42, 67, 95
<b>Ga-Na-O -Si</b>	$\text{NaGaSi}_2\text{O}_6$	34, 93
<b>Ge-K -O -Si</b>	$\text{K}_2\text{GeSi}_6\text{O}_{15}$	374
<b>Ge-O -Sr</b>	$\text{SrGeO}_3$	20
<b>H -Hf-K -O -Si-Ti-Zr</b>	$\text{K}_{2.03}(\text{Zr}_{0.87}\text{Ti}_{0.12}\text{Hf}_{0.01})\text{Si}_{3.01}\text{O}_9 \cdot \text{H}_2\text{O}$	341
<b>H -K -Li-Mg-Mn-Na-O -Si</b>	$(\text{Na}, \text{K})\text{Na}_2(\text{Mg}_2\text{Mn}^{3+}_2\text{Li})\text{Si}_8\text{O}_{22}(\text{OH})_2$	258
<b>H -K -Na-Nb-O -Si-Ti</b>	$(\text{K}, \text{Na})_8(\text{Ti}, \text{Nb})_9(\text{SiO}_3)_{16}(\text{O}, \text{OH})_{10} \cdot x\text{H}_2\text{O}$	334, 335
<b>H -K -Nd-O -Si</b>	$\text{K}_3\text{NdSi}_6\text{O}_{15} \cdot 2\text{H}_2\text{O}$	375, 376, 379, 382
<b>H -K -O -Si</b>	$(\text{KH})_2\text{Si}_2\text{O}_6$	45, 84
	$\text{KHSiO}_3$	94
<b>H -K -O -Si-Ti</b>	$\text{K}_2\text{TiSi}_3\text{O}_9 \cdot \text{H}_2\text{O}$	333, 335, 338, 340, 344
<b>H -K -O -Si-Ti-Zr</b>	$\text{K}_2(\text{Zr}_{0.86}\text{Ti}_{0.14})\text{Si}_3\text{O}_9 \cdot \text{H}_2\text{O}$	333
	$\text{K}_2\text{Zr}_{0.8}\text{Ti}_{0.2}\text{Si}_3\text{O}_9 \cdot \text{H}_2\text{O}$	340
<b>H -K -O -Si-Zr</b>	$\text{K}_2\text{ZrSi}_3\text{O}_9 \cdot \text{H}_2\text{O}$	333, 335, 383
	$\text{K}_3\text{Zr}_2\text{H}(\text{Si}_3\text{O}_9)_2 \cdot n\text{H}_2\text{O}$	333, 335
	$\text{K}_4\text{Zr}_2\text{Si}_6\text{O}_{18} \cdot 2\text{H}_2\text{O}$	334
<b>H -Li-Mg-Na-O -Si</b>	$\text{Na}_{0.95}(\text{Na}_{0.64}\text{Mg}_{0.97}\text{Li}_{0.27}\text{H}_{0.12})\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	236
<b>H -Li-Mn-Na-O -Si</b>	$(\text{Li}, \text{Na})\text{Mn}_4\text{Si}_5\text{O}_{14}(\text{OH})$	401
	$\text{LiNaMn}_8\text{Si}_{10}\text{O}_{28}(\text{OH})_2$	396
<b>H -Li-Na-O -Si-Ti</b>	$\text{Na}_3\text{LiTi}_2[\text{Si}_2\text{O}_6]_2\text{O}_2 \cdot 2\text{H}_2\text{O}$	45, 84, 95
<b>H -Mg-Mn-O -Si</b>	$\text{Mn}_2\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	228
<b>H -Mg-Na-O -Si</b>	$\text{Na}_{0.82}(\text{Na}_{0.81}\text{Mg}_{1.19})\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	236
	$(\text{Na}_{0.97}\square_{0.07})(\text{Na}_{0.94}\text{Mg}_{1.06})\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	269
	$\text{NaMg}_4[\text{Si}_6\text{O}_{15}\text{OH}](\text{OH})_2$	236, 269
	$\text{Na}_2\text{Mg}_4\text{Si}_6\text{O}_{16}\text{OH}_2$	225
	$\text{Na}_2\text{Mg}_6\text{Si}_8\text{O}_{22}(\text{OH})_2$	236, 252, 262, 269, 271, 297, 298, 310, 316
	$\text{Na}_2\text{O-MgO-SiO}_2\text{-H}_2\text{O}$ system	225
	$\text{Na}_{2.67}\text{Mg}_{5.33}\text{Si}_8\text{O}_{21.33}(\text{OH})_{2.67}$	225

Element system	Chemical formula	Page
<b>H -Mg-Na-O -Si (cont.)</b>	$\text{Na}_3\text{Mg}_5\text{Si}_8\text{O}_{21}(\text{OH})_3$	236, 247, 269, 280, 281, 310
<b>H -Mg-O -Si</b>	$\text{Mg}_7\text{Si}_8\text{O}_{22}(\text{OH})_2$	228, 235, 247, 251, 256, 309
<b>H -Mn-Na-O -Si</b>	$\text{NaMn}_2\text{Si}_3\text{O}_8(\text{OH})$	332
<b>H -Mn-O -Si</b>	$\text{Mn}^{2+}_2\text{SiO}_3(\text{OH})_2 \cdot \text{H}_2\text{O}$	46, 84, 95, 124
<b>H -Na-Nd-O -Si</b>	$\text{Na}_3\text{NdSi}_6\text{O}_{15} \cdot x\text{H}_2\text{O}$	376, 379, 382
<b>H -Na-O -Si-Sn-Zr</b>	$\text{Na}_2(\text{Zr}, \text{Sn})\text{Si}_4\text{O}_{11} \cdot 2\text{H}_2\text{O}$	420, 428
<b>H -Na-O -Si-Ti</b>	$\text{Na}_4\text{Ti}_2\text{Si}_8\text{O}_{22} \cdot x\text{H}_2\text{O}$	420, 428
<b>H -Na-O -Si-Zr</b>	$\text{Na}_2\text{ZrSi}_6\text{O}_{15} \cdot 3\text{H}_2\text{O}$	373, 376, 379, 382
	$\text{Na}_4\text{Zr}_2\text{Si}_{10}\text{O}_{26} \cdot 9\text{H}_2\text{O}$	428, 434
<b>H -Nb-O -Si-Ti</b>	$(\text{Ti}, \text{Nb})_4(\text{O}, \text{OH})_4[\text{Si}_6\text{O}_{17}]_2[\text{Si}_2\text{O}_7]_3$	377
<b>Hf-Li-Na-O -Si-Ti-Zr</b>	$\text{Li}_{1.00}\text{Na}_{1.02}(\text{Zr}_{0.94}\text{Ti}_{0.05}\text{Hf}_{0.01})\text{Si}_{6.06}\text{O}_{15.15}$	405
<b>In-Li-O -Si</b>	$\text{LiInSi}_2\text{O}_6$	42, 95
<b>In-Na-O -Sc-Si</b>	$\text{NaIn}_x\text{Sc}_{1-x}\text{Si}_2\text{O}_6$	93
	$\text{NaScSi}_2\text{O}_6 - \text{NaInSi}_2\text{O}_6$	35
<b>In-Na-O -Si</b>	$\text{NaInSi}_2\text{O}_6$	34, 92
<b>K -Li-Mn-Na-O -Si-V</b>	$\text{Na}_2\text{KMn}_2\text{LiV}_2\text{Si}_8\text{O}_{24}$	451
<b>K -Nd-O -Si</b>	$\text{K}_3\text{NdSi}_6\text{O}_{15}$	375, 376, 378, 379, 382, 383, 390
<b>K -O -Si-Ti</b>	$\text{K}_{1.98}\text{Ti}_{1.01}\text{Si}_{6.01}\text{O}_{15.3}$	383
	$\text{K}_2\text{TiSi}_6\text{O}_{15}$	374, 376, 379-382, 385
<b>K -O -Si-Zr</b>	$\text{K}_2\text{ZrSi}_6\text{O}_{15}$	373, 374, 376, 379, 382
<b>La-O -Si-Ti</b>	$\text{La}_2\text{TiSiO}_5$	465
<b>Li-M -Na-O -Si</b>	$(\text{Li}, \text{Na})\text{M}^{3+}\text{Si}_2\text{O}_6$	44
<b>Li-M -O -Si</b>	$\text{LiMSi}_2\text{O}_6$ (M = Sc, Ti, Cr, Fe, Ni, Ga, Sn)	84
<b>Li-Mg-Mn-Na-O -Si-Ti</b>	$\text{NaNa}_2(\text{MgMn}^{3+}_2\text{Ti}^{4+}\text{Li})\text{Si}_8\text{O}_{22}\text{O}_2$	236, 258
<b>Li-Mg-O -Sc-Si</b>	$(\text{Li}, \text{Sc})_{0.60}\text{Mg}_{0.40}\text{SiO}_3$	43
	$\text{Li}_x\text{Sc}_x\text{Mg}_{2-2x}\text{Si}_2\text{O}_6$	43, 75, 97, 181
	$[\text{Mg}_{(x-12)/3}\text{Sc}_4][\text{Li}_{4/3}\text{Si}_{(x-4)/3}]\text{O}_x$	43, 88
	$\text{Mg}_{1.54}\text{Li}_{0.23}\text{Sc}_{0.23}\text{Si}_2\text{O}_6$	97, 148
	$\text{MgSiO}_3 - \text{LiScSi}_2\text{O}_6$	43
<b>Li-Na-O -Si-Sn</b>	$\text{NaLiSnSi}_6\text{O}_{15}$	376, 379
<b>Li-Na-O -Si-Ti</b>	$\text{NaLiTiSi}_6\text{O}_{15}$	376, 379
<b>Li-Na-O -Si-Y</b>	$\text{Na}_2\text{LiYSi}_6\text{O}_{15}$	376, 379
<b>Li-Na-O -Si-Zr</b>	$\text{NaLiZrSi}_6\text{O}_{15}$	376, 397, 399, 401, 405, 407
<b>Li-Ni-O -Si</b>	$\text{LiNiSi}_2\text{O}_6$	94
<b>Li-O -Sc-Si</b>	$\text{LiScSi}_2\text{O}_6$	41-43, 94

Element system	Chemical formula	Page
<b>Li-O -Si</b>	$\text{Li}_2\text{O} - \text{SiO}_2$	67
	$\text{Li}_2\text{SiO}_3$	39, 67, 70, 78, 84, 94
<b>Li-O -Si-Sn</b>	$\text{LiSnSi}_2\text{O}_6$	42
<b>Li-O -Si-Ti</b>	$\text{LiTiSi}_2\text{O}_6$	41, 50, 94, 108
	$\text{Li}_2\text{TiSiO}_5$	457, 459
<b>Li-O -Si-V</b>	$\text{LiVSi}_2\text{O}_6$	41, 51, 70, 94, 109, 121, 156
	$\text{Li}_2\text{VSiO}_5$	457, 459, 465
<b>Li-O -Si-Zr</b>	$\text{Li}_2\text{ZrSi}_6\text{O}_{15}$	376, 379
<b>M -Mg-O -Si</b>	$\text{Mg}_{1-x}\text{M}_x\text{SiO}_3$ (M = Co, Ni)	79
<b>M -Na-O -Si</b>	$\text{NaMSi}_2\text{O}_6$ (M = Sc, Ti, V, Cr, Mn, In, Ga)	34, 84
	$\text{Na}_2\text{MSi}_4\text{O}_{10}$ (M = Co, Ni)	423, 426, 444
	$\text{Na}_2\text{MSi}_4\text{O}_{10}$ (M = Co, Ni, Cu)	417, 437
<b>M -Na-O -Si</b>	$\text{NaM}^{3+}\text{Si}_2\text{O}_6$ (M = Sc, Ti, V, Cr, Mn, Ga, In)	34
	$\text{NaM}^{3+}\text{Si}_2\text{O}_6$ (M = Ti, V, Cr)	51
<b>M -O -Si</b>	$(\text{MM}')\text{SiO}_3$	5
	$\text{MSiO}_3$ (M = Ca, Sr, Ba, Cd)	66
	$\text{MSiO}_3$ (M = Fe, Mg)	13
	$\text{MSiO}_3$ (M = Mg, Fe, Co)	13, 131
	$\text{MSiO}_3$ (M = $\text{Na}^+$ , $\text{Ca}^{2+}$ , $\text{Mg}^{2+}$ , $\text{Fe}^{2+}$ , $\text{Al}^{3+}$ )	4
<b>M -O -T</b>	$\text{M}_2\text{M}_1\text{T}_2\text{O}_6$ (M <sub>2</sub> , M <sub>1</sub> : octahedrally-coord. cations, T: tetrahedrally-coord. cations)	1, 4
<b>Mg-Mn-O -Si</b>	$(\text{Mn,Mg})\text{MgSi}_2\text{O}_6$	18, 83
	$(\text{Mn,Mg})\text{SiO}_3$	19, 83
	$\text{Mn}_{1-x}\text{Mg}_x\text{SiO}_3$	18, 89, 104, 105
	$\text{MnMgSi}_2\text{O}_6$	18, 41, 80, 83, 88, 89, 124
	$(\text{Mn}_x\text{Mg}_{1-x})_2\text{Si}_2\text{O}_6$	18, 102, 124
	$\text{MnSiO}_3 - \text{MgSiO}_3$	18
<b>Mg-Na-O -Si</b>	$\text{Na}(\text{Mg}_{0.5}\text{Si}_{0.5})\text{Si}_2\text{O}_6$	34, 93, 105
	$\text{Na}_2\text{Mg}_2\text{Si}_6\text{O}_{15}$	376, 379, 397, 398, 405, 411
<b>Mg-Ni-O -Si</b>	$(\text{Mg,Ni})\text{SiO}_3$	19
	$\text{Mg}_{1-x}\text{Ni}_x\text{SiO}_3$	79
	$\text{Ni}_{0.38}\text{Mg}_{1.62}\text{Si}_2\text{O}_6$	102
<b>Mg-O -Sc-Si</b>	$[\text{Mg}_{\equiv(x-7.5)/3}\text{Sc}_{\equiv 3}][\text{Mg}_{2/3}\text{Si}_{(x-4)/3}]\text{O}_x$	43, 88
<b>Mg-O -Si</b>	$\text{Mg}_2\text{SiO}_4$	11, 30
	$\text{Mg}_2\text{Si}_2\text{O}_6$	5-7, 19, 75, 83, 87, 101
	$\text{MgSiO}_3 - \text{Mg}_2\text{SiO}_4$	9

Element system	Chemical formula	Page
<b>Mg-O -Si (cont.)</b>	MgSiO <sub>3</sub>	7, 9-12, 16, 17, 19, 22, 23, 30, 43, 55, 68, 72, 74, 75, 83, 85-89, 96, 98-101, 119, 121, 128, 129, 172, 178-180
<b>Mg-O -Si-Zn</b>	(Mg,Zn)SiO <sub>3</sub>	19
	Zn <sub>0.45</sub> Mg <sub>1.55</sub> Si <sub>2</sub> O <sub>6</sub>	19, 102
	ZnMgSi <sub>2</sub> O <sub>6</sub>	19, 83, 92, 102
<b>Mn-Na-O -Si</b>	NaMnSi <sub>2</sub> O <sub>6</sub>	34, 92
	NaNa <sub>2</sub> (Mn <sup>2+</sup> <sub>2</sub> Mn <sup>3+</sup> <sub>2</sub> )Si <sub>8</sub> O <sub>22</sub> O <sub>2</sub>	236, 258
<b>Mn-O -Si</b>	MnSiO <sub>3</sub>	17, 21, 46, 69, 72, 83, 88, 89, 104, 108, 401
<b>Na-Ni-O -Si</b>	Na <sub>2</sub> NiSi <sub>4</sub> O <sub>10</sub>	417, 423, 428, 432, 434
<b>Na-O -Sc-Si</b>	NaScSi <sub>2</sub> O <sub>6</sub>	34, 84, 92
<b>Na-O -Si</b>	Na <sub>2</sub> SiO <sub>3</sub>	33, 39, 67, 70, 78, 84, 92, 120
<b>Na-O -Si-Ti</b>	NaTiSi <sub>2</sub> O <sub>6</sub>	34, 41, 50, 51, 70, 77, 78, 92, 109, 121, 174
	Na <sub>2</sub> TiSiO <sub>5</sub>	456, 457, 459, 465
	Na <sub>2</sub> TiSi <sub>4</sub> O <sub>11</sub>	417
	Na <sub>2</sub> Ti <sub>2</sub> Si <sub>2</sub> O <sub>9</sub>	456, 459, 466
	Na <sub>4</sub> Ti <sub>4</sub> [Si <sub>2</sub> O <sub>6</sub> ] <sub>2</sub> O <sub>6</sub>	45, 84, 94, 95
<b>Na-O -Si-V</b>	NaVSi <sub>2</sub> O <sub>6</sub>	34, 38, 51, 92, 109, 121, 156
<b>Na-O -Si-Y</b>	Na <sub>3</sub> YSi <sub>6</sub> O <sub>15</sub>	376, 377, 379, 382, 388
<b>Na-O -Si-Zn</b>	Na <sub>2</sub> ZnSi <sub>2</sub> O <sub>6</sub>	34, 84, 93
<b>Na-O -Si-Zr</b>	Na <sub>2</sub> O·Zr[SiO <sub>4</sub> ]	456
	Na <sub>2</sub> ZrSiO <sub>5</sub>	459, 465, 468
	Na <sub>2</sub> ZrSi <sub>4</sub> O <sub>11</sub>	417, 428, 432
<b>O -Pb-Si</b>	PbSiO <sub>3</sub>	44, 84, 94, 417, 428
<b>O -Pb-Si-Sr</b>	SrSiO <sub>3</sub> ; Pb <sup>2+</sup>	81, 122
<b>O -Si-Sr</b>	SrSiO <sub>3</sub>	20, 22, 66, 83, 90, 120, 122
<b>O -Si-Sr-V</b>	SrVSi <sub>2</sub> O <sub>7</sub>	422, 428, 432, 434
<b>O -Si-X -Y</b>	XYSi <sub>2</sub> O <sub>6</sub> (X = Na <sup>+</sup> , Ca <sup>2+</sup> ; Y = Fe <sup>2+</sup> , Fe <sup>3+</sup> , Mg <sup>2+</sup> )	38
<b>O -Si-Zn</b>	ZnSiO <sub>3</sub>	19, 22, 23, 26, 68, 76, 83, 91, 92, 138, 172
	Zn <sub>2</sub> SiO <sub>4</sub>	22
	Zn <sub>2</sub> Si <sub>2</sub> O <sub>6</sub>	42, 84
<b>O -Si-Zr</b>	ZrSi <sub>5</sub> O <sub>13</sub>	419
<b>O -X -Y -Z</b>	X <sub>2</sub> Y <sub>6</sub> Z <sub>6</sub> O <sub>20</sub> (X = Na, Ca, K; Y = Fe <sup>2+</sup> , Mg, Fe <sup>3+</sup> , Al, Ti, Mn and Ca; Z = Si, Al, Fe <sup>3+</sup> )	331
<b>Qz-Sp</b>	Sp <sub>61</sub> Qz <sub>39</sub> (Sp: LiAlSi <sub>2</sub> O <sub>6</sub> , Qz: quartz)	43