

ID	CLASSE (Strunz)	ID	SOTTOCLASSE (Strunz)	ID	CLASSE (New Dana)
1.A	Metals and Intermetallic Alloys	1.AA	Copper-cupalite family	1	Native Elements and Alloys
		1.AB	Zinc-brass family	2	Sulfides, including Selenides and Tellurides
		1.AC	Indium-tin family	3	Sulfosalts
		1.AD	Mercury-amalgam family	4	Simple Oxides
		1.AE	Iron-chromium family	5	Oxides containing uranium, and thorium
		1.AF	Platinum-group	6	Hydroxides and Oxides containing hydroxyl
		1.AG	PGE-metals alloy	7	Multiple Oxides
1.B	Metal Carbides, Silicides, Nitrides and Phosphides	1.BA	Carbides	8	Multiple Oxides containing Nb, Ta, and Ti
		1.BB	Silicides	9	Anhydrous and hydrated Halides
		1.BC	Nitrides	10	Oxyhalides and Hydroxyhalides
		1.BD	Phosphides	11	Halides complexes; alumino-fluorides
1.C	Metalloids e Nonmetals	1.CA	Arsenic group elements	12	Compound Halides
		1.CB	Carbon-silicon family	13	Acid Carbonates
		1.CC	Sulfur-selenium-iodine	14	Anhydrous Carbonates
2.A	Metal/Metalloid Alloys	2.AA	Alloys of metalloids with Cu, Ag, Au	15	Hydrated Carbonates
		2.AB	Nickel-metalloid alloys	16	Carbonates containing hydroxyl or halogen
		2.AC	Alloys of metalloids with PGE	17	Compound Carbonates
2.B	Metal Sulfides, M:S > 1:1 (mainly 2:1)	2.BA	With Cu, Ag, Au	18	Nitrates
		2.BB	With Ni	19	Nitrates containing hydroxyl or halogen
		2.BC	With Rh, Pd, Rh, Pt, etc.	20	Compound Nitrates
		2.BD	With Hg, Tl	21	Anhydrous and hydrated Iodates
		2.BE	With Pb (Bi)	22	Iodates containing hydroxyl or halogen
2.C	Metal Sulfides, M:S = 1:1 (and similar)	2.CA	With Cu	23	Compound Iodates
		2.CB	With Zn, Fe, Cu, Ag, etc.	24	Anhydrous Borates
		2.CC	With Ni, Fe, Co, etc.	25	Anhydrous Borates containing hydroxyl or halogen
		2.CD	With Sn, Pb, Hg, etc.	26	Hydrated Borates containing hydroxyl or halogen
2.D	Metal Sulfides, M:S = 3:4 and 2:3	2.DA	M:S = 3:4	27	Compound Borates
		2.DB	M:S = 2:3	28	Anhydrous acid and Sulfates
		2.DC	Variable M:S	29	Hydrated acid and Sulfates
2.E	Metal Sulfides, M:S ≤ 1:2	2.EA	M:S = 1:2 - With Cu, Ag, Au	30	Anhydrous Sulfates containing hydroxyl or halogen
		2.EB	M:S = 1:2 - With Fe, Co, Ni, PGE, etc.	31	Hydrated Sulfates containing hydroxyl or halogen
		2.EC	M:S = 1:>2	32	Compound Sulfates
2.F	Sulfides of Arsenic, Alkalies; Sulfides with Halide, Oxide, Hydroxide, H ₂ O	2.FA	With As, (Sb), S	33	Selenates and Tellurates
		2.FB	With Alkalies (without Cl, etc.)	34	Selenites, Tellurites and Sulfites
		2.FC	With Cl, Br, I (halide-sulfides)	35	Anhydrous Chromates
		2.FD	With O, OH, H ₂ O	36	Compound Chromates
2.G	Sulfarsenites, Sulfantimonites, Sulfbismuthites	2.GA	Neso-sulfarsenites, etc., without additional S	37	Anhydrous acid Phosphates
		2.GB	Neso-sulfarsenites, etc., with additional S	38	Anhydrous Phosphates, etc.
		2.GC	Poly-sulfarsenites	39	Hydrated acid Phosphates, etc.
		2.GD	Unclassified sulfosalts	40	Hydrated Phosphates, etc.
2.H	SnS Archetype	2.HA	With Cu, Ag, Fe (without Pb)	41	Anhydrous Phosphates, etc., containing hydroxyl or halogen
		2.HB	With Cu, Ag, Fe, Sn and Pb	42	Hydrated Phosphates, etc., containing hydroxyl or halogen
		2.HC	With only Pb	43	Compound Phosphates, etc.
		2.HD	With Tl	44	Antimonates
		2.HE	With alkalies H ₂ O	45	Acid and normal Antimonates and Arsenites

		2.HF	With Sn, S and PbS archetype structural units	46	Basic or halogen-containing Antimonites, Arsenites
2.J	PbS Archetype	2.JA	Chains combined into sheets	47	Vanadium oxysalts
		2.JB	Galena derivatives, with Pb	48	Anhydrous Molybdates and Tungstates
		2.JC	Galena derivatives, with Tl	49	Basic and hydrated Molybdates and Tungstates
2.K	Sulfarsenites	2.KA		50	Salts of organic acids
		2.KB		51	Insular SiO ₄ groups only
3.A	Simple Halides, without H ₂ O	3.AA	M:X = 1:1 and 2:3	52	Insular SiO ₄ groups and O, OH, F and H ₂ O
		3.AB	M:X = 1:2	53	Insular SiO ₄ groups and other anions or complex cations
		3.AC	M:X = 1:3	54	Borosilicates and some Beryllsilicates
3.B	Simple Halides, with H ₂ O	3.BA	M:X = 1:1 and 2:3	55	Si ₂ O ₇ groups, generally with no additional anions
		3.BB	M:X = 1:2	56	Si ₂ O ₇ with additional groups and O, OH, F and H ₂ O
		3.BC	M:X = 1:3	57	Insular Si ₃ O ₁₀ and larger noncyclic groups
		3.BD	Simple halides with H ₂ O and additional OH	58	Insular, mixed, single, and larger tetrahedral groups
3.C	Complex Halides	3.CA	Borofluorides	59	Three-membered rings
		3.CB	Neso-aluminofluorides	60	Four-membered rings
		3.CC	Soro-aluminofluorides	61	Six-membered rings
		3.CD	Ino-aluminofluorides	62	Eight-membered rings
		3.CE	Phyllo-aluminofluorides	63	Condensed rings
		3.CF	Tekto-aluminofluorides	64	Rings with other anions and insular silicate groups
		3.CG	Aluminofluorides with CO ₃ , SO ₄ , PO ₄	65	Single-width unbrached chains, W=1
		3.CH	Silicofluorides	66	Double-width unbrached chains, W=2
		3.CJ	With MX ₆ complexes; M=Fe, Mn, Cu	67	Unbrached chains with W>2
3.D	Oxyhalides, Hydroxyhalides and Related Double Halides	3.DA	With Cu, etc., without Pb	68	Structures with chains of more than one-width
		3.DB	With Pb, Cu, etc.	69	Chains with side branches or loops
		3.DC	With Pb (As, Sb, Bi), without Cu	70	Column or tube structures
		3.DD	Without Hg	71	Sheets of six-membered rings
4.A	Metal:Oxygen = 2:1 and 1:1	4.AA	Cation:anion (M:O) = 2:1 and 1.8:1	72	Two-dimensional infinite sheets with other than six-membered rings
		4.AB	M:O = 1:1 (and up to 1:1.25); with small to medium-size cations only	73	Condensed tetrahedral sheets
		4.AC	M:O = 1:1 (and up to 1:1.25); with large cations (±smaller ones)	74	Modulated layers
4.B	Metal:Oxygen = 3:4 and similar	4.BA	With small and medium-sized cations	75	Si tetrahedral frameworks
		4.BB	With only medium-sized cations	76	Al-Si frameworks
		4.BC	With medium-sized and large cations	77	Zeolites
		4.BD	With only large cations	78	Unclassified silicates

4.C	Metal:Oxygen = 2:3, 3:5, and similar	4.CA	With small cations
		4.CB	With medium-sized cations
		4.CC	With large and medium-sized cations
4.D	Metal:Oxygen = 1:2 and similar	4.DA	With small cations: Silica family
		4.DB	With medium-sized cations; chains of edge-sharing octahedra
		4.DC	With medium-sized cations; sheets of edge-sharing octahedra
		4.DD	With medium-sized cations; frameworks of edge-sharing octahedra
		4.DE	With medium-sized cations; with various polyhedra
		4.DF	With large (\pm medium sized cations); dimers and trimers of edge-sharing octahedra
		4.DG	With large (\pm medium sized cations); chains of edge-sharing octahedra
		4.DH	With large (\pm medium sized cations); sheets of edge-sharing octahedra
		4.DJ	With large (\pm medium sized cations); polyhedra framework
		4.DK	With large (\pm medium sized cations); tunnel structures
		4.DL	With large (\pm medium sized cations); fluorite-type structures
		4.DM	With large (\pm medium sized cations); unclassified
4.E	Metal:Oxygen = <1:2	4.EA	
4.F	Hydroxides (without V or U)	4.FA	Hydroxides with OH, without H ₂ O; corner-sharing tetrahedra
		4.FB	Hydroxides with OH, without H ₂ O; insular octahedra
		4.FC	Hydroxides with OH, without H ₂ O; corner-sharing octahedra
		4.FD	Hydroxides with OH, without H ₂ O; chains of edge-sharing octahedra
		4.FE	Hydroxides with OH, without H ₂ O; sheets of edge-sharing octahedra
		4.FF	Hydroxides with OH, without H ₂ O; various polyhedra
		4.FG	Hydroxides with OH, without H ₂ O; unclassified
		4.FH	Hydroxides with H ₂ O \pm (OH); insular octahedra
		4.FJ	Hydroxides with H ₂ O \pm (OH); corner-sharing octahedra
		4.FK	Hydroxides with H ₂ O \pm (OH); chains of edge-sharing octahedra
		4.FL	Hydroxides with H ₂ O \pm (OH); sheets of edge-sharing octahedra
		4.FM	Hydroxides with H ₂ O \pm (OH); unclassified
4.G	Uranyl Hydroxides	4.GA	Without additional cations
			With additional cations (K, Ca, Ba, Pb, etc.);
		4.GB	with mainly UO ₂ (O, OH) ₅ pentagonal polyhedra
		4.GC	With additional cations; with UO ₂ (O, OH) ₆ hexagonal polyhedra
4.H	V ^[5,6] Vanadates	4.HA	V ^[>4] Nesovanadates
		4.HB	Uranyl Sorovanadates
		4.HC	Sorovanadates
		4.HD	Inovanadates

		4.HE	Phyllovanadates
		4.HF	Tektovanadates
		4.HG	Unclassified V oxides
4.J	Arsenites, Antimonites, Bismuthites, Sulfites, Selenites, Tellurites, Iodates	4.JA	Arsenites, antimonites, bismuthites; without additional anions, without H ₂ O
		4.JB	Arsenites, antimonites, bismuthites; with additional anions, without H ₂ O
		4.JC	Arsenites, antimonites, bismuthites; without additional anions, with H ₂ O
		4.JD	Arsenites, antimonites, bismuthites; with additional anions, with H ₂ O
		4.JE	Sulfites
		4.JF	Selenites without additional anions, without H ₂ O
		4.JG	Selenites with additional anions, without H ₂ O
		4.JH	Selenites without additional anions, with H ₂ O
		4.JJ	Selenites with additional anions, with H ₂ O
		4.JK	Tellurites without additional anions, without H ₂ O
		4.JL	Tellurites with additional anions, without H ₂ O
		4.JM	Tellurites without additional anions, with H ₂ O
		4.JN	Tellurites with additional anions, with H ₂ O
4.K	Iodates	4.KA	Iodates without additional anions, without H ₂ O
		4.KB	Iodates with additional anions, without H ₂ O
		4.KC	Iodates without additional anions, with H ₂ O
		4.KD	Iodates with additional anions, with H ₂ O
5.A	Carbonates without additional anions, without H ₂ O	5.AA	Alkali carbonates
		5.AB	Alkali-earth (and other M ²⁺) carbonates
		5.AC	Alkali and alkali-earth carbonates
		5.AD	With rare-earth elements (REE)
5.B	Carbonates with additional anions, without H ₂ O	5.BA	With Cu, Co, Ni, Zn, Mg, Mn
		5.BB	With alkalis, etc.
		5.BC	With alkali-earth cations
		5.BD	With rare-earth elements (REE)
		5.BE	With Pb, Bi
		5.BF	With (Cl), SO ₄ and PO ₄
5.C	Carbonates without additional anions, with H ₂ O	5.CA	With medium-sized cations
		5.CB	With large cations (alkali and alkali-earth carbonates)
		5.CC	With rare-earth elements (REE)
5.D	Carbonates with additional anions, with H ₂ O	5.DA	With medium-sized cations
		5.DB	With large and medium-sized cations
		5.DC	With large cations
5.E	Uranyl Carbonates	5.EA	UO ₂ :CO ₃ = 1:1
		5.EB	UO ₂ :CO ₃ < 1:1 to 1:2
		5.EC	UO ₂ :CO ₃ = 1:3
		5.ED	UO ₂ :CO ₃ = 1:4

		5.EE	$\text{UO}_2:\text{CO}_3 = 1:5$
		5.EF	$\text{UO}_2:\text{CO}_3 > 1:1$
		5.EG	With SO_4 or SiO_4
5.N	Nitrates	5.NA	Without OH or H_2O
		5.NB	With OH
		5.NC	With H_2O
		5.ND	With OH (etc.) and H_2O
6.A	Monoborates	6.AA	BO_3 , without additional anions
		6.AB	BO_3 , with additional anions
		6.AC	$\text{B}(\text{O},\text{OH})_4$, without an with additional anions
6.B	Diborates	6.BA	Neso-diborates with double triangles $\text{B}_2(\text{O},\text{OH})_5$
		6.BB	Neso-diborates with double tetrahedra $\text{B}_2\text{O}(\text{OH})_6$
		6.BC	Ino-diborates with triangles and/or tetrahedra
6.C	Triborates	6.CA	Neso-triborates
		6.CB	Ino-triborates
		6.CC	Phyllo-triborates
6.D	Tetraborates	6.DA	Neso-tetraborates
		6.DB	Ino-tetraborates
		6.DC	Phyllo-tetraborates
		6.DD	Tekto-tetraborates
6.E	Pentaborates	6.EA	Neso-pentaborates
		6.EB	Ino-pentaborates
		6.EC	Phyllo-pentaborates
		6.ED	Tekto-pentaborates
6.F	Hexaborates	6.FA	Neso-hexaborates
		6.FB	Ino-hexaborates
		6.FC	Phyllo-hexaborates
6.G	Heptaborates and other megaborates	6.GA	
6.H	Unclassified borates	6.HA	
7.A	Sulfates (Selenates, Tellurates, Chromates, Molybdates, Wolframates) without additional anions, without H_2O	7.AA	With small cations
		7.AB	With medium-sized cations
		7.AC	With medium-sized and large cations
		7.AD	With only large cations
7.B	Sulfates (Selenates, etc.) with additional anions, without H_2O	7.BA	With small cations
		7.BB	With medium-sized cations
		7.BC	With medium-sized and large cations
		7.BD	With only large cations
7.C	Sulfates (Selenates, etc.) without additional anions, with H_2O	7.CA	With small cations
		7.CB	With medium-sized cations
		7.CC	With medium-sized and large cations
		7.CD	With only large cations
7.D	Sulfates (Selenates, etc.) with additional anions, with H_2O	7.DA	With small cations
		7.DB	With only medium-sized cations; insular octahedra and finite groups
		7.DC	With only medium-sized cations; chains of edge-sharing octahedra
		7.DD	With only medium-sized cation; sheets of edge-sharing octahedra
		7.DE	With only medium-sized cations; unclassified
		7.DF	With large and medium-sized cations

7.E	Uranyl Sulfates	7.EA	Without cations		
		7.EB	With medium-sized cations		
		7.EC	With medium-sized and large cations		
7.F	Chromates	7.FA	Without additional anions		
		7.FB	With additional O, V, Cl, and S		
		7.FC	With PO ₄ , AsO ₄ , SiO ₄		
		7.FD	Dichromates		
7.G	Molybdates and Wolframates	7.GA	Without additional anions or H ₂ O		
		7.GB	Without additional anions and/or H ₂ O		
7.H	Uranium and Uranyl Molybdates and Wolframates	7.HA	With U ⁴⁺		
		7.HB	With U ⁶⁺		
8.A	Phosphates, Arsenates, Vanadates without additional anions, without H ₂ O	8.AA	With small cations (some also with large ones)		
		8.AB	With medium-sized cations		
		8.AC	With medium-sized and large cations		
		8.AD	With only large cations		
8.B	Phosphates, etc., with additional anions, without H ₂ O	8.BA	With small and medium-sized cations		
		8.BB	With only medium-sized cations, (OH, etc.):RO ₄ ≤ 1:1		
		8.BC	With only medium-sized cations, (OH, etc.):RO ₄ > 1:1 and < 2:1		
		8.BD	With only medium-sized cations, (OH, etc.):RO ₄ = 2:1		
		8.BE	With only medium-sized cations, (OH, etc.):RO ₄ > 2:1		
		8.BF	With only medium-sized and large cations, (OH, etc.):RO ₄ < 0.5:1		
		8.BG	With only medium-sized and large cations, (OH, etc.):RO ₄ = 0.5:1		
		8.BH	With only medium-sized and large cations, (OH, etc.):RO ₄ = 1:1		
		8.BJ	With only medium-sized and large cations, (OH, etc.):RO ₄ = 1.5:1		
		8.BK	With only medium-sized and large cations, (OH, etc.):RO ₄ = 2:1, 2.5:1		
		8.BL	With only medium-sized and large cations, (OH, etc.):RO ₄ = 3:1		
		8.BM	With only medium-sized and large cations, (OH, etc.):RO ₄ = 4:1		
		8.BN	With only large cations, (OH, etc.):RO ₄ = 0.33:1		
		8.BO	With only large cations, (OH, etc.):RO ₄ ≥ 1:1		
		8.C	Phosphates, etc., without additional anions, with H ₂ O	8.CA	With small and large/medim cations
				8.CB	With only medium-sized cations RO ₄ :H ₂ O = 1:1
8.CC	With only medium-sized cations RO ₄ :H ₂ O = 1:1.5				
8.CD	With only medium-sized cations RO ₄ :H ₂ O = 1:2				
8.CE	With only medium-sized cations RO ₄ :H ₂ O ≤ 1:2.5				
8.CF	With large and medium-sized cations RO ₄ :H ₂ O > 1:1				
8.CG	With large and medium-sized cations RO ₄ :H ₂ O = 1:1				
8.CH	With large and medium-sized cations RO ₄ :H ₂ O < 1:1				

8.D	Phosphates, etc., with additional anions, with H ₂ O	8.CJ	With only large cations		
		8.DA	With small (and occasionally large) cations		
		8.DB	With only medium-sized cations, (OH, etc.):RO ₄ < 1:1		
		8.DC	With only medium-sized cations, (OH, etc.):RO ₄ = 1:1 and <2:1		
		8.DD	With only medium-sized cations, (OH, etc.):RO ₄ = 2:1		
		8.DE	With only medium-sized cations, (OH, etc.):RO ₄ = 3:1		
		8.DF	With only medium-sized cations, (OH, etc.):RO ₄ > 3:1		
		8.DG	With large and medium-sized cations, (OH, etc.):RO ₄ < 0.5:1		
		8.DH	With large and medium-sized cations, (OH, etc.):RO ₄ < 1:1		
		8.DJ	With large and medium-sized cations, (OH, etc.):RO ₄ = 1:1		
		8.DK	With large and medium-sized cations, (OH, etc.):RO ₄ > 1:1 and < 2:1		
		8.DL	With large and medium-sized cations, (OH, etc.):RO ₄ = 2:1		
		8.DM	With large and medium-sized cations, (OH, etc.):RO ₄ > 2:1		
		8.DN	With only large cations		
		8.DO	With CO ₃ , SO ₄ , SiO ₄		
		8.E	Uranyl Phosphates and Arsenates	8.EA	UO ₂ :RO ₄ = 1:2
				8.EB	UO ₂ :RO ₄ = 1:1
8.EC	UO ₂ :RO ₄ = 3:2				
8.ED	Unclassified				
8.FA	Diphosphates, etc., without OH and H ₂ O; dimers of corner-sharing RO ₄ tetrahedra				
8.F	Polyphosphates, Polyarsenates, Polyvanadates	8.FB	Diphosphates, etc., with OH only		
		8.FC	Diphosphates, etc., without H ₂ O only		
		8.FD	Diphosphates, etc., with OH and H ₂ O		
		8.FE	Ino-[4]vanadates		
		9.AA	Nesosilicates without additional anions; cations in tetrahedral [4] coordination		
9.A	Nesosilicates	9.AB	Nesosilicates without additional anions; cations in [4] and greater coordination		
		9.AC	Nesosilicates without additional anions; cations in octahedral [6] coordination		
		9.AD	Nesosilicates without additional anions; cations in [6] and/or generally greater coordination		
		9.AE	Nesosilicates with additional anions (O, OH, F, H ₂ O); cations in tetrahedral [4] and mostly greater coordination		
		9.AF	Nesosilicates with additional anions; cations in [4], [5] and/or only [6] coordination		
		9.AG	Nesosilicates with additional anions; cations in mostly [6] and >[6] coordination		
		9.AH	Nesosilicates with CO ₃ , SO ₄ , PO ₄ , etc.		
		9.AJ	Nesosilicates with BO ₃ triangles and/or B ^[4] , Be ^[4] tetrahedra, corner-sharing with SiO ₄ tetrahedra		
		9.AK	Uranyl Neso- and Polysilicates		

9.B	Sorosilicates	9.BA	Si ₂ O ₇ groups without non-tetrahedral anions; cations in tetrahedral [4] coordination		
		9.BB	Si ₂ O ₇ groups without non-tetrahedral anions; cations in tetrahedral [4] and greater coordination		
		9.BC	Si ₂ O ₇ groups without non-tetrahedral anions; cations in octahedral [6] and greater coordination		
		9.BD	Si ₂ O ₇ groups with additional anions; cations in tetrahedral [4] and greater coordination		
		9.BE	Si ₂ O ₇ groups with additional anions; cations in octahedral [6] and/or other coordination		
		9.BF	Sorosilicates with mixed SiO ₄ and Si ₂ O ₇ anions; cations in tetrahedral [4] and greater coordination		
		9.BG	Sorosilicates with mixed SiO ₄ and Si ₂ O ₇ anions; cations in octahedral [6] and greater coordination		
		9.BH	Sorosilicates with Si ₃ O ₁₀ or larger anions; cations in tetrahedral [4] and greater coordination		
		9.BJ	Sorosilicates with Si ₃ O ₁₀ or larger anions; cations in octahedral [6] and/or greater coordination		
		9.BK	Unclassified sorosilicates		
		9.C	Cyclosilicates	9.CA	[Si ₃ O ₉] ⁶⁻ 3-membered single rings, without insular complex anions
				9.CB	[Si ₃ O ₉] ⁶⁻ 3-membered single rings, with insular complex anions
				9.CC	[Si ₃ O ₉] ⁶⁻ branched 3-membered single rings
9.CD	[Si ₃ O ₉] ⁶⁻ 3-membered double rings				
9.CE	[Si ₄ O ₁₂] ⁸⁻ 4-membered single rings, without insular complex anions				
9.CF	[Si ₄ O ₁₂] ⁸⁻ 4-membered single rings, with insular complex anions				
9.CG	[Si ₄ O ₁₂] ⁸⁻ branched 4-membered single rings				
9.CH	[Si ₄ O ₁₂] ⁸⁻ 4-membered double rings				
9.CJ	[Si ₆ O ₁₈] ¹²⁻ 6-membered single rings, without insular complex anions				
9.CK	[Si ₆ O ₁₈] ¹²⁻ 6-membered single rings, with insular complex anions				
9.CL	[Si ₆ O ₁₈] ¹²⁻ branched 6-membered single rings				
9.CM	[Si ₆ O ₁₈] ¹²⁻ 6-membered double rings,				
9.CN	[Si ₈ O ₂₄] ¹⁶⁻ 8-membered rings				
9.CO	[Si ₉ O ₂₇] ¹⁸⁻ 9-membered rings				
9.CP	12-membered and larger rings				
9.D	Inosilicates	9.DA	Inosilicates with 2-periodic single chains, Si ₂ O ₆ ; pyroxene family		
		9.DB	Inosilicates with 2-periodic single chains, Si ₂ O ₆ ; with additional O, OH, H ₂ O		
		9.DC	Inosilicates with branched 2-periodic single chains		
		9.DD	Inosilicates with 2-periodic double chains; orthoamphiboles family		
		9.DE	Inosilicates with 2-periodic double chains; clinoamphiboles family		

	9.DF	Inosilicates with 2-periodic multiple chains
	9.DG	Inosilicates with 3-periodic single and multiple chains
	9.DH	Inosilicates with 4-periodic single chains
	9.DJ	Inosilicates with 4-periodic double and triple chains
	9.DK	Inosilicates with 5-periodic single chains
	9.DL	Inosilicates with 5-periodic double chains
	9.DM	Inosilicates with 6-periodic single chains
	9.DN	Inosilicates with 6-periodic double chains
	9.DO	Inosilicates with 7-, 8-, 10-, 12-, and 14-periodic chains
	9.DP	Transitional ino-phyllsilicates structures
	9.DQ	Unclassified inosilicates
9.E	Phyllosilicates	9.EA Single nets of tetrahedral with 4-, 5-, (6-), and 8-membered rings
	9.EB	Double nets with 4- and 6-membered rings
	9.EC	Phyllosilicates with mica sheets, composed of tetrahedral and octahedral nets
	9.ED	Phyllosilicates with kaolinite layers, composed of tetrahedral and octahedral nets
	9.EE	Single tetrahedral nets of 6-membered rings connected by octahedral nets or octahedral bands
	9.EF	Single nets with 6-membered rings, connected by $M^{[4]}$, $M^{[8]}$, etc.
	9.EG	Double nets with 6-membered rings
	9.EH	Transitional structures between phyllosilicate and other silicate units
9.F	Tektosilicates without zeolitic H_2O	9.FA Tektosilicates without additional non-tetrahedral anions
	9.FB	Tektosilicates with additional anions

9.G	Tektosilicates with zeolitic H ₂ O: zeolite family	9.GA	Zeolites with chains of 4-membered rings connected by a fifth Si
		9.GB	Zeolites with chains of single connected 4-membered rings
		9.GC	Zeolites with chains of doubly-connected 4-membered rings
		9.GD	Zeolites with chains of 5-membered rings
		9.GE	Zeolites with sheets with 4-4-1-1 structural units
		9.GF	Zeolites with Leucite-type frameworks
		9.GG	Zeolites with cages and double cages of 4-, 6- and 8- membered rings
		9.GH	Unclassified zeolites
9.H	Unclassified silicates	9.HA	With alkali and alkali-earth elements
		9.HB	With Ti, V, Cr
		9.HC	With Mn, Fe
		9.HD	With Co, Ni
		9.HE	With Cu, Zn
		9.HF	With Nb, Ta, Zr
		9.HG	With REE, Th
		9.HH	With Pb
9.J	Germanates	9.JA	
10.A	Salts of organic acids	10.AA	Acetates
		10.AB	Oxalates
		10.AC	Benzine salts
		10.AD	Cyanates
10.B	Hydrocarbons	10.BA	
10.C	Miscellaneous Organic Minerals	10.CA	