




Article

IMA–CNMNC approved mineral symbols

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Abstract

Several text symbol lists for common rock-forming minerals have been published over the last 40 years, but no internationally agreed standard has yet been established. This contribution presents the first International Mineralogical Association (IMA) Commission on New Minerals, Nomenclature and Classification (CNMNC) approved collection of 5744 mineral name abbreviations by combining four methods of nomenclature based on the Kretz symbol approach. The collection incorporates 991 previously defined abbreviations for mineral groups and species and presents a further 4753 new symbols that cover all currently listed IMA minerals. Adopting IMA–CNMNC approved symbols is considered a necessary step in standardising abbreviations by employing a system compatible with that used for symbolising the chemical elements.

Keywords: nomenclature, mineral names, symbols, abbreviations, groups, species, elements, IMA, CNMNC

(Received 28 November 2020; accepted 14 May 2021; Accepted Manuscript published online: 18 May 2021;
Associate Editor: Anthony R Kampf)

Introduction

Using text symbols for abbreviating the scientific names of the chemical elements listed on the periodic table is a well-accepted praxis in chemistry, first introduced by the Swedish scientist Jöns Jakob Berzelius (Berzelius, 1814). He used one or two letters selected from the Latin names to convey the elements in a short and concise notation that has been accepted universally since the mid-19th Century. A system for abbreviating rock-forming minerals was first proposed by Kretz (1983): traditionally known as Kretz symbols. In a similar way to Berzelius, Kretz used a capitalised letter taken from the initial of the name and one or two lower case letters selected from the rest of the word. The selection was chosen to be representative and did not conflict with the element symbols. As the individual letters were not specific to any particular name components, this approach provided flexibility and choice in the selection of new abbreviations used to cover the expanding number of recognised mineral species. Introducing three-letter symbols also had the benefit of being able to generate a maximum of 17,576 combinations of the alphabet ($26 \times 26 \times 26$) and therefore offered significantly more diversity than the limited 676 combinations of two-letter abbreviations. Due to the combined function of mineral text symbols as abbreviations, these terms are used interchangeably

Over the years, the list of Kretz (1983) with its 192 symbols was expanded to 240 by Siivolam and Schmid (2007) and to 371 by Whitney and Evans (2010). More recently, Warr (2020) added a further 168 new abbreviations for clay minerals and associated phases. In its guide to authors, *The Canadian Mineralogist* (2019) also presents a complementary list of 821 Kretz symbols, although these are not entirely compatible with the more widely

used collection proposed by Whitney and Evans (2010). Despite the availability of recommended abbreviations for the commonly studied mineral species, to date < 18% of mineral names recognised by the International Mineralogical Association (IMA) have been attributed with a symbol. Also, proposed symbols are not always consistently applied and some authors still prefer to make up their abbreviations rather than to follow published recommendations. This is particularly the case for the remaining ca. 82% of minerals that have not yet been allocated a symbol.

This contribution presents the first complete collection of mineral symbols for all currently listed IMA mineral species and commonly used group names by modifying the Kretz symbol approach (Table 1). The compilation, approved by the Commission on New Minerals, Nomenclature and Classification (CNMNC) (Miyawaki et al., 2021), significantly expands the number of available abbreviations and is designed to improve the degree to which mineral symbols are standardised in future publications. The list of 5744 abbreviated mineral names demonstrates that the Kretz system can be successfully adapted to cover the complete catalogue of recognised minerals and to accommodate new approved species. It also provides a more systematic approach to nomenclature than would be achieved by combining past and future lists in an *ad hoc* approach.

Nomenclature

As symbols for the commonly studied minerals are already available, most of these, and in particular those proposed by Whitney and Evans (2010), are adopted in the new listing. However, to cover the full catalogue of mineral names, the nomenclature scheme has been modified to generate new symbols by using a combination of the following four methods (Warr, 2020).

- (1) The initial letters of a mineral name. These are occasionally used in singular form (e.g. aluminite = A) or as two letters

Continued after Table 1

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Cite this article: Warr L.N. (2021) IMA–CNMNC approved mineral symbols. *Mineralogical Magazine* 85, 291–320. <https://doi.org/10.1180/mgm.2021.43>

Table 1. List of IMA-CNMNC approved mineral symbols (4753 new and 991 previously defined) *denotes mineral names where abbreviations have been adopted from previous publications. The origin of all symbols are detailed in the Supplementary material.

Name	Symbol	Name	Symbol	Name	Symbol
A		Aktashite	Ats	Aluminosilicate*	Als
Abellaite	Abe	Alabandite	Abd	Aluminosugilite	Asug
Abelsonite	Abl	Alacránite	Acr	Alumoåkermanite	Aåk
Abenakiite-(Ce)	Abk-Ce	Alamosite	Aam	Alumoedtollite	Aedt
Abernathyite	Abn	Alarsite	Ars	Alumohydrocalcite	Ahcal
Abhurite	Abh	Albertiniite	Abt	Alumoklyuchevskite	Akyv
Abramovite	Abm	Albite*	Ab	Alumotantite	Atan
Abswurmbackite	Abs	Albrechtschraufite	Asf	Alumovesuvianite	Aves
Abuite	Abu	Alburnite	Alb	Alunite*	Alu
Acanthite	Aca	Alcantarillaite	Alc	Alunogen	Alg
Acetamide	Ace	Alcaparrosaitite	Apr	Alvanite	Alv
Achalaite	Ahl	Aldermanite	Adm	Alwilkinsite-(Y)	Alw-Y
Achávalite	Ahv	Aldridgeite	Adg	Amakinite*	Amk
Achyrophanite	Aph	Aleksandrovite	Asd	Amamoorite	Amo
Acmonidesite	Acm	Aleksite	Alk	Amarantite	Ama
Actinolite*	Act	Aleutite	Aeu	Amarillite	Amr
Acuminite	Acu	Alexkhomyakovite	Akmy	Amblygonite	Aby
Adachiite	Adc	Alexkuznetsovite-(Ce)	Axk-Ce	Ambrinoite	Amb
Adamite	Ad	Alexkuznetsovite-(La)	Axk-La	Ameghinite	Agh
Adamsite-(Y)	Ads-Y	Alflarsenite	Alf	Amesite*	Ame
Adanite	Adn	Alforsite	Afr	Amicite	Ami
Addibischhoffite	Add	Alfredopetrovite	Afd	Aminoffite	Amf
Adelite	Ade	Alfredstelnernerite	Asz	Ammineite	Amm
Admontite	Amt	Algodonite	Ago	Ammonioalunite	Aalu
Adolfpateraitite	Adp	Alicewilsonite-(YCe)	Aws-YCe	Ammonioborite	Abo
Adranosite	Arn	Aliettite*	Ali	Ammoniojarosite	Ajrs
Adranosite-(Fe)	Arn-Fe	Alkali feldspar*	Afs	Ammonioalasilite	Alas
Adrianite	Adt	Allabogdanite	Abg	Ammonioleucite	Alct
Aegirine*	Aeg	Allactite	Ala	Ammoniomagnesiovoltaite	Amvlt
Aegirine-Augite	Aeg-Aug	Allanite-(Ce)*	Aln-Ce	Ammoniomathesiusite	Amat
Aenigmatite*	Aen	Allanite-(La)*	Aln-La	Ammoniotinsleyite	Atin
Aerinite	Aer	Allanite-(Nd)*	Aln-Nd	Ammoniovoltaite	Avlt
Aerugite	Aru	Allanite-(Y)*	Aln-Y	Ammoniozippeite	Azip
Aeschnynite-(Ce)*	Aes-Ce	Allanpringite	Apg	Amphibole*	Amp
Aeschnynite-(Nd)*	Aes-Nd	Allantoin	Aan	Amstallite	Ams
Aeschnynite-(Y)*	Aes-Y	Allargentum	All	Analcime*	Anl
Afghanite	Afg	Alleghanyite	Alh	Anandite*	Ana
Afmitite	Afm	Allendeite	Aed	Anapaite	Anp
Afwillite	Afw	Allochalcocelinite	Acc	Anastasenkoite	Aas
Agaitite	Aga	Alloclasite	Acl	Anatase*	Ant
Agakhanovite-(Y)	Agk-Y	Allophane*	Alp	Anatolyite	Aly
Agardite-Ce	Agr-Ce	Alloriite	Aor	Ancylite-(Ce)	Anc-Ce
Agardite-La	Agr-La	Alluaivite	Aav	Ancylite-(La)	Anc-La
Agardite-Nd	Agr-Nd	Alluaudite*	Ald	Andalusite*	And
Agardite-Y	Agr-Y	Almandine*	Alm	Andersonite	Anr
Agmantinitite	Agm	Almarudite*	Alr	Andorite IV*	Ado IV
Agrellite	Are	Almeidaite	Amd	Andorite VI*	Ado VI
Agricolaite	Agc	Alnaperbøeite-(Ce)	Apbø-Ce	Andradite*	Adr
Agrinierite	Agn	Alpeite	Apt	Andreadiniite	Adi
Aguilrite	Agu	Alpersite	Aps	Andrémyerite	Amy
Aheylite	Ahe	Alsakharovite-Zn	Ask-Zn	Andreyivanovite	Aiv
Ahlfeldite	Afe	Alstonite	Asn	Andrianovite	Adv
Ahrensite	Ahr	Altaite*	Alt	Anduoite	Adu
Aikinite*	Aik	Alterite	Atr	Andychristyite	Acs
Aiolosite	Aio	Althausite	Ahs	Andymcdonaldite	Amc
Airdite	Air	Althupite	Ahp	Andyrobbersite	Arb
Ajoite	Aj	Altisite	Ati	Angarfite	Agf
Akaganeite*	Akg	Alum-(K)	Aum-K	Angastonite	Ags
Akaogiite	Aka	Alum-(Na)	Aum-Na	Ángelaite	Áge
Akatoreite	Akt	Aluminite	A	Angelellite	Agl
Akdalaite	Akd	Aluminium*	Al	Anglesite*	Ang
Åkermanite*	Åk	Aluminoceladonite*	Acel	Anhydrite*	Anh
Akhtenskite	Akh	Aluminocerite-(Ce)	Acrt-Ce	Anhydrokainite	Ahk
Akimotoite	Aki	Aluminocopiapite	Acpi	Anilite*	Ani
Aklimaite	Akm	Aluminocoquimbite	Acoq	Ankerite*	Ank
Akopovaite	Av	Aluminomagnesiophulsite	Amhul	Ankinovichite	Akv
Akrochordite	Akr	Alumino-oxy-rossmanite	Aorsm	Annabergite	Anb
Aksaite	Aks	Aluminopyracmonite	Apyr	Annite*	Ann

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Anorpiment	Apm	Arrojadite-(BaNa)	Ajd-BaNa	Auricupride	Auc
Anorthite*	An	Arrojadite-(KFe)	Ajd-KFe	Aurihydrargyrumite	Ahg
Anorthoclase*	Ano	Arrojadite-(KNa)	Ajd-KNa	Aurivilliusite	Avl
Anorthominasragrite	Amrg	Arrojadite-(PbFe)	Ajd-PbFe	Aurorite	Aro
Ansermetite	Anm	Arrojadite-(SrFe)	Ajd-SrFe	Aurostibite	Ausb
Antarcticite	Atc	Arsenatrotitanite	Anttn	Austinite	Aus
Anthoinite	Atn	Arsenbrackebuschite	Abbs	Autunite*	Aut
Anthonyite	Aty	Arsendescloizite	Adcz	Avdeevite	Avd
Anthophyllite*	Ath	Arsenic*	As	Avdoninite	Avn
Antigorite*	Atg	Arseniopleite	Apl	Averievite	Avv
Antimonselite	Atm	Arsenosiderite	Assd	Avicennite	Avc
Antimony* (<i>stibium</i>)	Sb	Arsenmarcobaldiite	Amcb	Avogadrite	Avg
Antipinite	Atp	Arsenmedaite	Amed	Awaruite*	Awr
Antlerite	Atl	Arsenoclasite	Asc	Axelite	Axe
Antofagastaite	Atf	Arsenocrandallite	Acdl	Axinite-(Fe)*	Ax-Fe
Anyuite	Any	Arsenoflorencite-(Ce)	Aflo-Ce	Axinite-(Mg)*	Ax-Mg
Anzaitite-(Ce)	Anz-Ce	Arsenoflorencite-(La)	Aflo-La	Axinite-(Mn)*	Ax-Mn
Apachite	Apa	Arsenogorceixite	Agcx	Azoproite	Azo
Apatite*	Ap	Arsenogoyazite	Agoy	Azurite*	Azu
Apexite	Ape	Arsenohauchecornite	Ahau	B	
Aphthalite	Att	Arsenohopeite	Ahop	Babánekite	Bbá
Apjohnite	Apj	Arsenolamprite	Asl	Babefphite	Bbf
Apowite	Apw	Arsenolite	Aso	Babingtonite*	Bab
Apophyllite*	Apo	Arsenopalladinite	Apdn	Babkinite	Bbk
Apuanite	Apu	Arsenopyrite*	Apy	Backite	Bac
Aqualite	Aq	Arsenotučekite	Atuč	Badakhshanite-(Y)	Bad-Y
Aradite	Ara	Arsenovanmeersscheite	Avms	Badalovite	Bdl
Aragonite*	Arg	Arsenowagnerite	Awag	Baddeleyite*	Bdy
Arakiite	Ark	Arsenquatradorite	Aado	Badengzhuite	Bdz
Aramayoite*	Ary	Arsentsumebite	Atsu	Bafertisite	Bft
Arangasite	Ans	Arsenudinaite	Audn	Baghdadite	Bgd
Arapovite	Apv	Arsenuranospathite	Aush	Bahariyaite	Bah
Aravaipaite	Avp	Arsenuranylite	Auy	Bahianite	Bhi
Aravaite	Arv	Arsiccioite	Asi	Baileychlore*	Blc
Arcanite	Acn	Arsmirandite	Asm	Bainbridgeite-(YCe)	Bbg
Archerite	Aht	Arthurite	Atu	Bairdite	Bai
Arcbite	Arc	Artinite	Art	Bakhchisaraitsevite	Bkc
Arcubisite	Acb	Artroite	Ate	Baksanite	Bks
Ardaite	Ada	Artsmithite	Ash	Balangeroite	Bal
Ardealite	Adl	Arupite	Arp	Balestraitite*	Bls
Ardennite-(As)	Ard-As	Arzrunite	Arz	Baličžuničite	Bžć
Ardennite-(V)	Ard-V	Asbecasite	Abc	Balipholite	Blp
Arfvedsonite*	Arf	Asbolane	Asb	Balkanite	Bkn
Argandite	Agd	Aschamalmite	Ahm	Balliranoite	Blr
Argentobaumhauerite	Abha	Ashburtonite	Ahb	Balyakinite	Byk
Argentodufrenoyite	Aduf	Ashcroftine-(Y)	Acf-Y	Bambollaite	Bmb
Argentojarosite	Agjrs	Ashoverite	Aov	Bamfordite	Bfd
Argentoliveingite	Aliv	Asimowite	Amw	Banalsite*	Bns
Argentopearceite	Apea	Asisite	Ass	Bandyllite	Bny
Argentopentlandite	Apn	Åskagenite-(Nd)	Åsk-Nd	Bannermanite	Bnm
Argentopyrite	Agpy	Aspedamite	Apd	Bannisterite*	Ban
Argentotennantite-(Zn)	Atnt-Zn	Aspidolite*	Asp	Baotite	Bao
Argentotetrahedrite-(Fe)	Attr-Fe	Asselbornite	Asbn	Barahonaite-(Al)	Bho-Al
Argentotetrahedrite-(Hg)	Attr-Hg	Astrocyanite-(Ce)	Acy-Ce	Barahonaite-(Fe)	Bho-Fe
Argentotetrahedrite-(Zn)	Attr-Zn	Astrophyllite*	Ast	Bararite	Brr
Argesite	Age	Atacamite	Ata	Baratovite	Btv
Argutite*	Agt	Atelestite	Ale	Barberite	Bbi
Argyrodite*	Agy	Atelisite-(Y)	Ael-Y	Barbosalite	Bsa
Arhbarite	Arh	Atencioite	Aco	Barentsite	Brts
Ariegilatite	Agi	Athabascaite	Atb	Bariandite	Brd
Arisite-(Ce)	Ari-Ce	Atheneite	Ah	Baričite	Bć
Arisite-(La)	Ari-La	Atlasovite	Atv	Barikaite	Bka
Aristarainite	Ais	Atokite	Ato	Barioferrite	Baf
Armalcolite*	Arm	Attakolite	Ako	Bario-oligite	Bolg
Armangite	Amg	Attikaite	Atk	Bario-orthojoaquinite	Bojq
Armbrusterite*	Abr	Aubertite	Aub	Barioperovskite	Bprv
Armellinoite-(Ce)	Aml-Ce	Auerbakhite	Aue	Bariopharmacoalumite	Bpal
Armenite	Amn	Augelite*	Aul	Bariopharmacosiderite	Bpsd
Armstrongite	Asg	Augite*	Aug	Bariosincosite	Bscs
Arrheniusite-(Ce)	Arr-Ce	Auriacusite	Aur	Barlowite	Blw
Arrojadite-(BaFe)	Ajd-BaFe	Aurichalcite	Ach	Barnesite	Bar

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Barquillite	Bql	Benjaminite	Bnj	Bismite	Bis
Barrerite	Bre	Benleonardite	Bln	Bismoclite	Bmc
Barringerite	Bgr	Bennesherite	Bnh	Bismuth*	Bi
Barroisite*	Brs	Benstonite	Ben	Bismuthinite	Bin
Barrotite	Bro	Bentorite	Bto	Bismutite	Bit
Barrydawsonite-(Y)	Bdw-Y	Benyacarite	Byc	Bismutocolumbite	Bclb
Barstowite	Bsw	Beraunite	Bru	Bismutoferrite	Bif
Bartelkeite	Btk	Berborite	Bbo	Bismutohauechecornite	Bhau
Bartonite	Btn	Berdesinskiite	Bds	Bismutostibiconite	Bsbc
Barwoodite	Bwo	Berezanskite	Bzk	Bismutotantalite	Bttl
Barylite	By	Bergenite	Bgn	Bitikleite	Bkl
Barysilite*	Bsl	Bergslagite	Bgl	Bityite*	Bty
Baryte*	Brt	Berlinite	Ber	Bixbyite*	Bxb
Barytoalcite	Bcal	Bermanite	Brm	Bjarebyite	Bj
Barytolamprophyllite	Blmp	Bernalite	Bnl	Blakeite	Bak
Bassanite*	Bss	Bernardite	Bnd	Blatonite	Blt
Bassetite	Bas	Bernarlottiite	Bl	Blatterite	Bla
Bassoite	Bso	Berndtite	Bti	Bleasdaleite	Ble
Bastnäsite-(Ce)*	Bsn-Ce	Berryite	Bry	Blixite	Blx
Bastnäsite-(La)*	Bsn-La	Berthierine*	Brh	Blöditte	Blö
Bastnäsite-(Nd)*	Bsn-Nd	Berthierite*	Btr	Blossite	Blo
Bastnäsite-(Y)*	Bsn-Y	Bertossaite	Bts	Bluebellite	Bbl
Batagayite	Btg	Bertrandite	Btd	Bluelizardite	Blz
Batievaite-(Y)	Bvt-Y	Beryl*	Brl	Bluestreakite	Blu
Batiferrite	Bfe	Beryllite	Byt	Bobcookite	Bbc
Batisite	Bat	Beryllonite	Bel	Bobfergusonite	Bfg
Batisivite	Bsv	Berzelianite*	Brz	Bobfinchite	Bfc
Baumhauerite	Bha	Berzeliite	Bze	Bobierite	Bob
Baumhauerite II	Bha II	Beshtauite	Bes	Bobjonessite	Bjon
Baumoite	Bam	Betafite	Btf	Bobkingite	Bkg
Baumstarkite	Bum	Betalomonosovite	Blom	Bobmeyerite	Bmy
Bauranoite	Bau	Betekhtinite*	Bkh	Bobshannonite	Bsha
Bavenite	Bvn	Betpakdalite-CaCa	Bpd-CaCa	Bobtraillite	Bta
Bavsiite	Bav	Betpakdalite-CaMg	Bpd-CaMg	Bodieite	Bod
Bayerite*	Byr	Betpakdalite-FeFe	Bpd-FeFe	Bogdanovite	Bog
Bayldonite	Bay	Betpakdalite-NaCa	Bpd-NaCa	Bøggildite	Bgg
Bayleyite	Byy	Betpakdalite-NaNa	Bpd-NaNa	Boggsite	Bgs
Baylissite	Byl	Bettertonite	Bet	Bøgvadite	Bgv
Bazhenovite	Baz	Beudantite	Bdn	Bohdanowiczite	Boh
Bazirite	Bzr	Beusite*	Beu	Böhmite*	Bhm
Bazzite	Bz	Beusite-(Ca)	Beu-Ca	Bohseite	Bhs
Bearsite	Bea	Beyerite	Bey	Bohuslavite	Bhv
Bearthite	Bth	Bezsmertnovite	Bez	Bojarite	Boj
Beaverite-(Cu)	Bvr-Cu	Biachellaite	Bcl	Bokite	Bkt
Beaverite-(Zn)	Bvr-Zn	Biagioniite	Bgi	Boleite	Bol
Bechererite	Bec	Bianchiniite	Bcn	Bolivarite	Bva
Beckettite	Bek	Bianchite	Bnc	Boltwoodite	Bwd
Becquerelite	Bqr	Bicapite	Bic	Bonaccordite	Bna
Bederite	Bdr	Bicchulite*	Bch	Bonacinaite	Bci
Béhierite	Béh	Bideauxite	Bdx	Bonattite	Bon
Behoite	Beh	Bieberite	Bie	Bonazziite	Bzz
Béhounekite	Bhn	Biehlite	Bhl	Bonshtedtite	Bsd
Beidellite*	Bei	Bigcreekite	Big	Boothite	Boo
Belakovskiite	Bkk	Bijvoetite-(Y)	Bij-Y	Boracite	Boc
Belendorffite	Bdf	Bikitaite	Bik	Boralsilite*	Bor
Belkovite	Bkv	Bilibinskite	Bb	Borax*	Brx
Bellbergite	Blb	Bilinite	Bli	Borcarite	Bcr
Bellidoite	Bld	Billietite	Bil	Borisenkoite	Bsk
Bellingerite	Blg	Billingsleyite	Bgy	Borishanskite	Bhk
Belloite	Bll	Billwiseite	Bwi	Bornemanite	Bma
Belogubite	Egb	Bimbowrieite	Bbw	Bornhardtite	Bhd
Belomarinaite	Bmr	Bindheimite	Bhe	Bornite*	Bn
Belousovite	Busv	Biotite*	Bt	Borocookeite*	Bckt
Belovite-(Ce)	Blv-Ce	Biphosphammite	Bpam	Borodaevite	Bdv
Belovite-(La)	Blv-La	Biraite-(Ce)	Bia-Ce	Boromullite	Bmul
Belyankinite	Byn	Biraite-(La)	Bia-La	Boromuscovite*	Bms
Bementite*	Bem	Birchite	Bc	Borovskite	Bvk
Benauite	Bnu	Biringuccite	Bgc	Bortnikovite	Bnk
Benavidesite	Bnv	Birnessite*	Bir	Boscardinite	Bcd
Bendadaite	Bdd	Birunite	Brn	Bosiite	Bos
Benitoite	Bni	Bischofite	Bsf	Bosoite	Bs

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Bostwickite	Btw	Buddingtonite	Bud	Calciosamarските	Csmk
Botallackite	Blk	Bukovite	Bko	Calcioantite	Ctan
Botryogen	Byg	Bukovskýite	Buk	Calciouranoite	Cun
Bottinoite	Bot	Bulachite	Buh	Calcioursilite	Caur
Botuobinskite	Btb	Bulgakite*	Bgk	Calcioeatचितte	Cvea
Bouazzerite	Boz	Bultfonteinite*	Bul	Calcite*	Cal
Boulangerite*	Bou	Bunnoite	Bno	Calcjarlite	Cjar
Bournonite*	Bnn	Bunsenite	Bse	Calclacite	Calc
Bouškaite	Bok	Burangaite	Brg	Calcurmolite	Cau
Boussingaultite	Bsg	Burbankite	Bbn	Calcybeborosilite-(Y)	Cbbs-Y
Bowieite*	Bow	Burckhardtite	Bkd	Calderite*	Cdr
Bowlesite	Bwl	Burgessite	Bge	Calderónite	Cdn
Boyleite	Boy	Burkeite	Bke	Caledonite	Cdo
Braccoite	Bcc	Burnettite	Bnet	Calkinsite-(Ce)	Clk-Ce
Bracewellite	Bwe	Burnsite	Bur	Callaghanite	Cgh
Brackebuschite	Bbs	Burovaite-Ca	Brv-Ca	Calomel	Clo
Bradaczekite	Bdc	Burpalite	Brp	Calumetite	Clu
Bradleyite	Bd	Burroite	Burr	Calvertite	Cvt
Braggite	Bg	Burtite	Bu	Calzirtite	Caz
Braithwaiteite	Bwt	Buryatite	Buy	Camanchacaite	Ccc
Braitschite-(Ce)	Btc-Ce	Buseckite	Bsc	Cámaraite	Cám
Brammallite*	Bml	Buserite*	Bsr	Camaronesite	Cmr
Brandãoite	Bdã	Bushmakinite	Bmk	Camérolaite	Cmé
Brandholzite	Bdh	Bussenite	Bus	Cameronite	Cme
Brandtite	Bdt	Bussyite-(Ce)	Bsy-Ce	Camgasite	Cmg
Brannerite	Bnr	Bussyite-(Y)	Bsy-Y	Caminite	Cmi
Brannockite*	Bra	Bustamite*	Bst	Campigliaite	Cpg
Brassite	Bsi	Butianite	But	Campostriniite	Cps
Brattforsite	Bf	Butlerite	Btl	Canaphite	Cnp
Braunerite	Bun	Bütschliite	Büt	Canasite	Cns
Braunite*	Bnt	Buttgenbachite	Bba	Canavesite	Cnv
Brazilianite	Bzl	Byelorussite-(Ce)	Bye-Ce	Cancrinite*	Ccn
Bredigite	Bdi	Bykovaite	Byv	Cancrisilite	Cnc
Breithauptite*	Bhp	Byrudite	Byd	Canfieldite	Cfi
Brendelite	Bde	Bystrite	Bys	Cannizzarite*	Cnz
Brenkite	Bki	Byströmite	Bym	Cannonite	Cnn
Brewsterite-Ba	Brw-Ba	Bytzite	Btz	Canosioite	Cso
Brewsterite-Sr	Brw-Sr	Byzantievite	Byz	Canutite	Can
Breyite	Byi	C		Caosite	Cao
Brezinaite	Bzn	Cabalzarite	Clz	Capgaronite	Cga
Brianite	Bne	Cabriite	Cbr	Cappelenite-(Y)	Cpp-Y
Brianroulstonite	Brsn	Cabvinite	Cbv	Capranicaite	Cpc
Brianyoungite	Byo	Cacoxenite	Cac	Caracolite	Cco
Briartite*	Btt	Cadmium*	Cd	Carboborite	Cab
Bridgesite-(Ce)	Bdg-Ce	Cadmoidite	Cad	Carbobystrite	Cbys
Bridgmanite	Bdm	Cadmoseilite	Cds	Carbocernaite*	Cbc
Brindleyite*	Bly	Cadwaladerite	Cwd	Carboirite	Cb
Brinrobertsite*	Brb	Caesiumpharmacosiderite	Cpsd	Carbokentbrooksitite	Cktb
Britholite-(Ce)*	Bri-Ce	Cafarsite	Caf	Carbonatecyanotrichite	Ccya
Britholite-(Y)*	Bri-Y	Cafetite	Cft	Cardite	Cdi
Britvinite	Bv	Cahnite	Cah	Carduccite	Cdu
Brizziite	Bzi	Cairncrossite*	Ccs	Caresite	Cre
Brochantite	Bct	Calamaite	Clm	Carletonite	Cto
Brockite	Bck	Calaverite*	Clv	Carletonmooreite	Cmo
Brodtkorbite*	Bdk	Calciborite	Cbo	Carlfrancisite	Cfc
Bromargyrite	Bag	Calcinaksite	Cnk	Carlfriesite	Clf
Bromellite	Bmel	Calcioancylite-(Ce)	Canc-Ce	Carlgesseckite-(Nd)	Csk-Nd
Brontesite	Bte	Calcioancylite-(Nd)	Canc-Nd	Carlhintzeite	Chz
Brookite*	Brk	Calcioandryobertsite	Carb	Carlinite	Cni
Browneite	Bw	Calcioaravaipaite	Cavp	Carlosbarbosaite	Cbb
Brownleeite	Bwn	Calcioburbankite	Cbbn	Carlsruizite	Crz
Brownmillerite	Bmlr	Calciocatapleite	Cctp	Carlosturanite*	Csr
Brucite*	Brc	Calcioconiapite	Ccpi	Carlsbergite	Cbg
Brügggenite	Brü	Calciodelrioite	Cdlr	Carlsonite	Csn
Brugnatellite	Bug	Calcioferrite	Cflr	Carmeltazite	Ctz
Brumadoite	Bmd	Calciohilairite	Chlr	Carmichaelite	Cmh
Brunogeierite	Bng	Calciojohillerite	Cjhl	Carminite	Cmt
Brushite	Bsh	Calciojangbeinite	Clgb	Carnallite	Cna
Bubnovaite	Bub	Calciojermanite	Cjmm	Carnotite*	Cnt
Buchwaldite	Bwa	Calcio-olivine	Caol	Carobbiite	Crb
Buckhornite	Bhr	Calciopectersite	Cpts	Carpathite	Cpa

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Carpholite*	Car	Chalcosiderite	Csd	Chlorothionite	Ctn
Carraraite	Cra	Chalcostibite	Ccsb	Chloroxiphite	Cxp
Carrboydite*	Cby	Chalcothallite	Ccth	Chloalite	Cho
Carrollite	Cli	Challacolloite	Chc	Chondrodite*	Chn
Caryinite	Cyn	Chambersite	Cbs	Chongite	Cng
Caryochroite	Cyh	Chaméanite	Céa	Chopinite	Cpn
Caryopilite*	Cpl	Chamosite*	Chm	Chovanite	Cov
Cascandite	Cas	Chanabayaite	Cba	Chrisstanleyite	Csl
Caseyite	Csy	Changbaiite	Chg	Christelite	Cis
Cassagnaite	Csg	Changchengite	Ccg	Christite	Cri
Cassedanneite	Cda	Changoite	Cgo	Christofschäferite-(Ce)	Csf-Ce
Cassidyite	Cdy	Chantalite	Cht	Chromatite	Crn
Cassiterite*	Cst	Chaoite	Ch	Chrombismite	Cbis
Castellaroite	Ctr	Chapmanite	Cpm	Chromceladonite	Ccel
Caswellsilverite	Cws	Charleshatchettite	Chh	Chromferide	Cfe
Catalanoite	Ct	Charlesite	Chrl	Chromio-pargasite	Cprg
Catamarcaite*	Ctm	Charmarite	Char	Chromite*	Chr
Catapleiite	Ctp	Charoite	Cha	Chromium*	Cr
Cattierite*	Cat	Chatkalite	Ctk	Chromium-dravite	Cdrv
Cattiite	Ctt	Chayesite	Cys	Chromo-alumino-povondraite	Capov
Cavansite	Cav	Chegemite	Cgm	Chromphyllite*	Crp
Cavoite	Cvo	Chekhovichite	Ckh	Chromschiefelinite	Csfl
Cayalsite-(Y)	Cyl-Y	Chelkarite	Cka	Chrysoberyl	Cbrl
Caysichite-(Y)*	Cay-Y	Chenevixite	Cvx	Chrysocolla*	Ccl
Cebaite-(Ce)	Ceb-Ce	Chengdeite	Cgd	Chrysothallite	Cry
Cebollite	Cbl	Chenguodaite	Cgu	Chrysotile*	Ctl
Čechite	Čec	Chenite	Che	Chubarovite	Cub
Čejkaite	Čej	Chenmingite	Cnm	Chudobaite	Cdb
Celadonite*	Cel	Cheralite	Cher	Chukanovite	Ckn
Celestine*	Clt	Cheremnykhite	Cny	Chukhrovite-(Ca)*	Chk-Ca
Celleriite	ClI	Cherepanovite	Cpv	Chukhrovite-(Ce)*	Chk-Ce
Celsian*	Cls	Chernikovite	Ckv	Chukhrovite-(Nd)*	Chk-Nd
Centennialite	Cte	Chernovite-(Y)	Chv-Y	Chukhrovite-(Y)*	Chk-Y
Cerchiaraites-(Al)	Ccr-Al	Chernykhite*	Cyk	Chukochenite	Ckc
Cerchiaraites-(Fe)	Ccr-Fe	Chervetite	Crv	Chukotkaite	Ckk
Cerchiaraites-(Mn)	Ccr-Mn	Chesnokovite	Ck	Churchite-(Y)	Cuh-Y
Cerianite-(Ce)	Cei-Ce	Chessexite	Cex	Chursinite	Csi
Cerite-(Ce)*	Crt-Ce	Chesterite*	Chs	Chvaleticeite	Cva
Cerium*	Ce	Chestermanite	Csm	Chvilevaite	Cvi
Černýite	Čný	Chevkinite-(Ce)	Cvk-Ce	Ciacciulliite	Cia
Cerromojonite	Cmj	Chiappinoite-(Y)	Cap-Y	Cinnabar*	Cin
Ceruleite	Cru	Chiavennite	Cve	Ciprianiite	Cip
Cerussite*	Cer	Chibaite	Cib	Ciriottiite	Cit
Cervandonite-(Ce)	Cvd-Ce	Chihuahuaite	Cih	Cirrolite	Ci
Cervantite	Cvn	Childrenite	Chd	Clairite	Clai
Cervelleite*	Cvl	Chiluite	Cil	Claraite	Clar
Cesante	Csa	Chinchorroite	Cch	Claringbullite	Cgb
Césarferreiraite	Céf	Chinleite-(Y)	Chi-Y	Clarkeite	Cke
Cesàrolite	Csà	Chiolite	Cio	Claudeteite	Cdt
Cesbronite	Ces	Chirvinskyite	Cvs	Clausthalite	Cth
Cesiodymite	Ced	Chistyakovaite	Cak	Clearcreekite	Cck
Cesiokenopyrochlore	Ckpcl	Chivruaiite	Cvr	Clerite	Cle
Cesplumtantite	Cptan	Chiyokoite	Cyo	Cleusonite	Ceu
Cetineite	Cet	Chkalovite	Ckl	Cliffordite	Cff
Chabazite-Ca*	Cbz-Ca	Chladniite	Clad	Clinoamphibole	Cam
Chabazite-K*	Cbz-K	Chloraluminite	Clá	Clinoatacamite	Cata
Chabazite-Mg*	Cbz-Mg	Chlorapatite	Clap	Clinobehoite	Cbht
Chabazite-Na*	Cbz-Na	Chlorargyrite	Cag	Clinobisvanite	Cbi
Chabazite-Sr*	Cbz-Sr	Chlorartinite	Cart	Clinocervantite	Ccvn
Chabournéite	Chb	Chlorbartonite	Cbtn	Clinochlore*	Clc
Chadwickite	Cdw	Chlorellestadite	Clel	Clinoclase	Cno
Chaidamuite	Cdm	Chlorite*	Chl	Clinoenstatite*	Cen
Chalcanthite	Cct	Chloritoid*	Cld	Clino-ferri-holmquistite	Cfhlm
Chalcoalumite	Cca	Chlorkyuygenite	Cky	Clino-ferro-ferri-holmquistite	Cffhlm
Chalcocite*	Cc	Chlormagaluminite*	Cma	Clinoferrosilite*	Cfs
Chalcocyanite	Ccy	Chlormanganokalite	Cmk	Clinohedrite	Cnh
Chalcomenite	Ccm	Chlormayenite	Cmy	Clinohumite*	Chu
Chalconatronite	Chna	Chlorocalcite	Ccal	Clinojimthompsonite	Cjim
Chalcophanite*	Cph	Chloromagnesite	Cmgs	Clinokurchatovite	Ckht
Chalcophyllite*	Chp	Chloromenite	Cmn	Clinometaborite	Cmbo
Chalcopyrite*	Ccp	Chlorophoenicite	Cpo	Clino-oscar Kempffite	Cokp

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Clinophosinaite	Cpsi	Corundum*	Crn	Cyanochroite	Cyc
Clinoptilolite-Ca*	Cpt-Ca	Corvusite	Cvu	Cyanotrichite	Cya
Clinoptilolite-K*	Cpt-K	Cosalite*	Cos	Cylindrite*	Cy
Clinoptilolite-Na*	Cpt-Na	Coskrenite-(Ce)	Ckr-Ce	Cymrite	Cym
Clinopyroxene*	Cpx	Cossaite	Css	Cyprine	Cyp
Clinosafflorite	Csaf	Costibite*	Csb	Cyrlilovite	Cyr
Clino-suenoite	Csue	Cotunnite	Cot	Czochralskiite	Cz
Clinotobermorite*	Ctbn	Coulsonite*	Cou	D	
Clinungemachite	Cug	Cousinite	Cus	Dachiardite-Ca	Dac-Ca
Clinozoisite*	Czo	Coutinhoite	Cti	Dachiardite-K	Dac-K
Clintonite*	Cln	Covellite*	Cv	Dachiardite-Na	Dac-Na
Cloncurryite	Ccu	Cowlesite	Cow	Dadsonite	Dad
Coalingite*	Clg	Coyoteite	Coy	Dagenaisite	Dag
Cobaltarthurite	Caru	Crandallite*	Cdl	Daliranite	Da
Cobaltaustinitite	Caus	Cranswickite	Cwk	Dalnegorskite	Dng
Cobaltite*	Cbt	Crawfordite	Cfd	Dalnegroite	Dnr
Cobaltkieserite	Cksr	Creaseyite	Cse	Dalyite	Dly
Cobaltkoritnigite	Ckor	Crednerite	Cnr	Damaraite	Dm
Cobaltlotharmeyerite	Clmy	Creedite	Cee	Damiaite	Dam
Cobaltneustädtelite	Cneu	Crerarite	Cea	Danalite*	Dan
Cobaltoblödite	Cblö	Crichtonite	Cic	Danbaite	Dba
Cobaltomenite	Cbm	Criddleite	Cdd	Danburite	Dbu
Cobaltpentlandite	Copn	Crimsonite	Cms	Danielsite	Dns
Cobalttsunmorite	Ctsm	Cristobalite*	Crs	D'ansite	D'an
Cobaltzippeite	Czip	Crocobelonite	Ccb	D'ansite-(Fe)	D'an-Fe
Coccinite	Cci	Crocoite	Crc	D'ansite-(Mn)	D'an-Mn
Cochromite	Cchr	Cronstedtite*	Cro	Dantopaite*	Dnt
Coconinoite	Coc	Cronusite	Cnu	Daomanite	Dao
Coesite*	Coe	Crookesite*	Crk	Daqingshanite-(Ce)*	Daq-Ce
Coffinite*	Cof	Crowningshieldite	Csh	Darapiosite*	Dar
Cohenite*	Coh	Crybostryxite	Cbx	Darapskite	Drp
Coiraitite	Coi	Cryolite*	CrI	Dargaite	Drg
Coldwellite*	Cwl	Cryolithionite	Cyln	Darrellhenryite	Dhry
Colemanite	Cole	Cryptocalcite	Cpch	Dashkovaite	Dkv
Colimaite	Com	Cryptohalite	Cphl	Datolite*	Dat
Colinowensite	Cwn	Cryptomelane*	Cml	Daubréeite	Dau
Collinsite	Coll	Cryptophyllite	Cp	Daubrèéite*	Dbr
Coloradoite*	Clr	Cualstibite	Casb	Davanite	Dvn
Colquiriite	Cqr	Cuatrocapaite-(K)	Ctc-K	Davemaite	Dvm
Columbite-(Fe)	Clb-Fe	Cuatrocapaite-(NH₄)	Ctc-NH ₄	Davidbrownite-(NH₄)	Dbn-NH ₄
Columbite-(Mg)	Clb-Mg	Cubanite*	Cbn	Davidite-(Ce)	Dvd-Ce
Columbite-(Mn)	Clb-Mn	Cuboargyrite	Cbag	Davidite-(La)	Dvd-La
Colusite	Col	Cumengeite	Cge	Davidlloydite	Dld
Comancheite	Cmc	Cummingtonite*	Cum	Davidsmithite	Dsm
Combeite	Cbe	Cupalite	Cup	Davinçite	Dvc
Comblainite	Cob	Cuprite*	Cpr	Davsite	Dav
Compreignacite	Cgn	Cuproauride	Cua	Davreuxite	Drx
Congolite	Cgl	Cuprobismutite	Cbit	Davyne	Dvy
Conichalcite	Con	Cuprocopiapite	Cucpi	Dawsonite	Dws
Connellite*	Cnl	Cuproiridsite	Cir	Deanesmithite	Dsh
Cookeite*	Ckt	Cuprokalininite	Ckal	Debattistiite	Dbt
Coombsite*	Cmb	Cupromakopavonite	Cmpav	Decagonite	Dec
Cooperite	Cpe	Cupromakovickyite	Cmak	Decrespignyite-(Y)	Dcp-Y
Coparsite	Cop	Cupromolybdate	Cmyb	Deerite*	Dee
Copiapite	Cpi	Cupronyite	Cney	Defernite*	Def
Copper (cuprum)*	Cu	Cupropavonite	Cpav	Dekatriasartorite	Dsat
Coquandite	Cqd	Cupropearceite	Cpea	Delafossite*	Del
Coquimbite	Coq	Cupropolybasite	Cplb	Delhayelite	Dhy
Coralloite	Crll	Cuprorhodsite*	Crh	Delhuyarite-(Ce)	Dhu-Ce
Corderoite	Cde	Cuprorivaite	Cuv	Deliensite	Dli
Cordierite*	Crd	Cuprosklodowskite	Cskl	Delindeite	Dde
Cordylite-(Ce)	Cod-Ce	Cuprospinel	Cspl	Dellagiustaite	Dgt
Cordylite-(La)	Cod-La	Cuprostibite	Cusb	Dellaite*	Dll
Corkite	Cok	Cuprotungstite	Ctgs	Deloneite	Dln
Cornetite	Cne	Curetonite	Cut	Deloryite	Dlo
Cornubite	Cnb	Curienite	Cue	Delrioite	DI
Cornwallite	Cnw	Curite	Cui	Deltalumite	Dal
Coronadite*	Cor	Currierite	Cur	Delvauxite	Dvx
Correianevesite	Corr	Cuspidine*	Csp	Demagistrisite	Dmg
Corrensitite*	Crr	Cuyaite	Cuy	Demartinite	Dma
Cortesognoite	Ctg	Cuzticitite	Cuz	Demesmaekerite	Dmm

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Demicheleite-(Br)	Dem-Br	Dovyrenite	Dov	Ekaterinite	Eka
Demicheleite-(Cl)	Dem-Cl	Downeyite	Dny	Ekatite	Ekt
Demicheleite-(I)	Dem-I	Doyleite	Doz	Ekebergite	Ekb
Denisovite	Dnv	Dozyite*	Doz	Ekplexite	Ekp
Denningite	Dnn	Dravertite	Dra	Elasmochloite	Ela
Depmeierite	Dep	Dravite*	Drv	Elbaite*	Elb
Derbylite	Dby	Drechslerite	Dre	Elbrusite	Ebs
Derriksita	Drk	Dresserite	Dsr	Eldfellite	Edf
Dervillite	Dvl	Dreyerite	Dye	Eldragónite*	Eld
Desautelsite*	Des	Dritsite	Drt	Eleomelanite	Elm
Descloizite	Dcz	Drobecite	Dro	Eleonorite	Eln
Despujolsite	Dpj	Droninoite	Dr	Elgoresyite	Ego
Dessauite-(Y)	Dss-Y	Drugmanite	Dru	Eliopoulosite	Epo
Destinezite	Dtz	Drysdallite	Dry	Eliseevite	Esv
Deveroite-(Ce)	Dvr-Ce	Dualite	Dua	Ellenbergerite*	Ell
Devilliersite	Dvi	Dufrénite*	Dfr	Ellinaite	El
Devilleite	Dev	Dufrénoysite*	Duf	Ellingsenite	Elg
Devitoite*	Dvt	Duftite	Dft	Ellisite	Els
Dewindtite	Dew	Dugganite	Dug	Elpasolite	Elp
Diaboleite	Dbol	Dukeite	Duk	Elpidite	Epd
Diadochite	Ddc	Dumontite	Dmt	Eltybyyuite	Elt
Diamond*	Dia	Dumortierite*	Dum	Elyite	Ely
Diaoyudaoite	Dyd	Dundasite	Dun	Embreyite	Emb
Diaphorite	Dpr	Durangite	Dur	Emeleusite	Eme
Diaspore*	Dsp	Duranusite*	Du	Emilite	Emi
Dickinsonite-(KMnNa)*	Dcn-KMnNa	Dusmatovite*	Dus	Emmerichite	Emr
Dickite*	Dck	Dussertite	Dst	Emmonsite	Ems
Dickthomssenite	Dth	Dutkevichite-(Ce)	Dut-Ce	Emplectite*	Emp
Diegogattaite	Dga	Dutrowite	Dtw	Empressite	Eps
Dienerite	Dne	Duttonite	Dtn	Enargite*	Eng
Dietrichite	Dtr	Dwornikite	Dwo	Engelhauptite*	Egh
Dietzeite	Die	Dymkovite	Dym	Englishite	Egs
Digenite*	Dg	Dypingite	Dyp	Enneasartorite	Esat
Dimorphite	Dim	Dyrnaesite-(La)	Dyr-La	Enstatite*	En
Dingdaohengite-(Ce)	Ddh-Ce	Dyscrasite	Dys	Eosphorite*	Eos
Dinite	Din	Dzhalindite	Dz	Ephesite*	Eph
Diopside*	Di	Dzharkenite	Dzh	Epididymite	Edd
Dioptase*	Dpt	Dzhuluite	Dzl	Epidote*	Ep
Dioskouriite	Dio	Dzierżanowskite	Dża	Epidote-(Sr)	Ep-Sr
Direnzoite	Drz	E		Epifanovite	Efv
Dissakisite-(Ce)*	Dis-Ce	Eakerite	Ea	Epistilbite	Esb
Dissakisite-(La)*	Dis-La	Earlandite	Ear	Epistolite	Epi
Disulfodadsomite	Ddad	Earlshannonite	Esn	Epsomite	Esm
Dittmarite	Dmr	Eastonite*	Eas	Erazoite	Erz
Diversilite-(Ce)	Dvs-Ce	Ecandrewsite*	Ec	Ercitite	Erc
Dixenite	Dxn	Ecdemite	Ecd	Erdite	Erd
Djerfisherite*	Djr	Eckerite	Ekr	Ericaite	Eic
Djurleite*	Dju	Eckermannite*	Eck	Ericlaxmanite	Elx
Dmisokolovite	Dsk	Eckhardtite	Ehd	Ericssonite	Ers
Dmisteinbergite	Dsb	Eclarite*	Ecl	Erikapohlite	Erk
Dmitryivanovite	Div	Écrinsite	Écr	Erikjonssonite	Ejs
Dobrovolskyite	Dvo	Eddavidite	Edv	Eringaite	Erg
Dobšináite	Dob	Edenharterite	Eht	Eriochalcite	Ech
Dokuchaevite	Dok	Edenite*	Ed	Erionite-Ca*	Eri-Ca
Dolerophanite	Dph	Edgarbaileite	Ebl	Erionite-K*	Eri-K
Dollaseite-(Ce)	Dls-Ce	Edgarite	Ebg	Erionite-Na*	Eri-Na
Dolomite*	Dol	Edgrewite	Egr	Erlianite	Ern
Doloresite	Dlr	Edingtonite	Edi	Erlichmanite*	Erl
Domerockite	Dom	Edoylerite	Eoy	Ermakovite	Ekv
Domeykite*	Do	Edscottite	Est	Erni nickelite	Enk
Domeykite-β	Do-β	Edtollite	Edt	Erniggliite	Eni
Donbassite*	Db	Edwardsite	Edw	Ernstburkeite	Ebu
Donharrisite	Dhr	Effenbergerite	Efb	Ernstite	Ens
Donnayite-(Y)	Dna-Y	Efremovite	Efr	Ershovite	Esh
Donowensite	Dnw	Eggletonite*	Egg	Ertxiite	Ert
Donpeacorite	Don	Eglestonite	Egl	Erythrite	Ery
Donwilhelmsite	Dwh	Ehrleite	Ehr	Erythrosiderite	Esd
Dorallcharite	Drc	Eifelite	Eif	Erzwiesite	Ezw
Dorfmanite	Dfm	Eirikite	Eir	Escheite*	Esc
Dorrite	Dor	Eitelite	Eit	Esdanaite-(Ce)	Edn-Ce
Douglasite	Dgl	Ekanite	Ek	Eskebornite	Ebn

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Eskimoite	Ekm	Fencooperite	Fco	Ferro-ferri-hornblende	Ffhbl
Eskolaite*	Esk	Fengchengite	Fcg	Ferro-ferri-katophorite	Ffktp
Espadaite	Esp	Feodosiyite	Fdy	Ferro-ferri-nybøite	Ffnyb
Esperanzaite	Epz	Ferberite	Feb	Ferro-ferri-obertiite	Ffob
Esperite	Epr	Ferchromide	Fcr	Ferro-ferri-pedrizite	Ffpd
Esquireite	Esq	Ferdowsiite	Fdw	Ferro-fluoro-edenite	Ffed
Esseneite*	Ess	Fergusonite-(Ce)*	Fgs-Ce	Ferro-fluoro-pedrizite	Fflpd
Ettringite	Ett	Fergusonite-(Ce)-β*	Fgs-Ce-β	Ferro-gedrite	Fged
Eucairite	Eca	Fergusonite-(Nd)-β*	Fgs-Nd-β	Ferro-glaucophane	Fgln
Euchlorine	Ecr	Fergusonite-(Y)*	Fgs-Y	Ferrohexahydrite	Fhhy
Euchroite	Euc	Fergusonite-(Y)-β*	Fgs-Y-β	Ferrohögbomite-2N2S	Fhög-2N2S
Euclase	Ecs	Ferhodsite	Frh	Ferro-holmquistite	Fhlm
Eucryptite	Ecp	Fermiite	Fmi	Ferro-hornblende	Fhbl
Eudialyte*	Eud	Fernandinite	Frn	Ferroindialite	Find
Eudidymite	Edy	Ferroyhyte	Fox	Ferro-katophorite	Foktp
Eugenite	Eug	Ferraioioite	Frl	Ferrokentbrooksite	Fktb
Eugsterite	Egt	Ferrarisite	Fer	Ferrokésterite*	Fks
Eulytine	Eul	Ferriakasakaite-(Ce)	Fak-Ce	Ferrokinoshitalite*	Fkns
Eurekadumpite	Eur	Ferriakasakaite-(La)	Fak-La	Ferrolaueite	Flae
Euxenite-(Y)	Eux-Y	Ferriallanite-(Ce)*	Faln-Ce	Ferromerrillite	Fmer
Evansite	Evn	Ferriallanite-(La)*	Faln-La	Ferronickelplatinum	Fnpt
Evdokimovite	Evd	Ferriandrosite-(La)	Fea-La	Ferronigerite-2N1S	Fng-2N1S
Evsite	Ev	Ferribushmakinite	Fbmk	Ferronigerite-6N6S	Fng-6N6S
Evenkite	Evk	Ferricerite-(La)	Fecr-La	Ferronordite-(Ce)	Fnor-Ce
Eveslogite	Evl	Ferricopiapite	Fcpi	Ferronordite-(La)	Fnor-La
Evseevite	Evs	Ferricoronadite	Fcor	Ferro-papikeite	Fpa
Ewaldite	Ew	Ferrierite-K	Frr-K	Ferro-pargasite*	Fprg
Ewingite	Ewg	Ferrierite-Mg	Frr-Mg	Ferro-pedrizite	Fopd
Eylettersite	Eyl	Ferrierite-Na	Frr-Na	Ferorhodonite	Frdn
Eyselite	Eys	Ferrierite-NH₄	Frr-NH ₄	Ferro-richterite*	Frct
Ezcurrite	Ezc	Ferri-fluoro-katophorite	Fflktp	Ferrockbridgeite	Forck
Eztlite	Ez	Ferri-fluoro-leakeite	Fflk	Ferrorosemaryite	Frm
F		Ferri-ghoseite	Fgh	Ferrosaponite*	Fsap
Fabianite	Fbn	Ferri-hellandite-(Ce)	Fhld-Ce	Ferroselite	Fse
Fabrièsite*	Fab	Ferrihollandite*	Fhol	Ferrosilite*	Fs
Faheyite	Fah	Ferrihydrite*	Fhy	Ferroskutterudite	Fskt
Fahleite	Fhl	Ferri-kaersutite*	Fkrs	Ferrostalderite	Fstd
Fairbankite	Fbk	Ferri-katophorite	Fktp	Ferrostrunzite	Fostz
Fairchildite	Fch	Ferri-leakeite	Flk	Ferrotaafeite-2N'2S	Ftf-2N'2S
Fairfieldite*	Ffd	Ferrilotharmeyerite	Flmy	Ferrotaafeite-6N'3S	Ftf-6N'3S
Faizievite	Fai	Ferriolybdate	Fmyb	Ferro-taramite	Ftrm
Falcondoite*	Fcd	Ferri-mottanaite-(Ce)	Fmot-Ce	Ferrotitanowodginite	Ftwgd
Falgarite	Fal	Ferrinatrite	Fnat	Ferrotchilinite	Ftch
Falkmanite	Fmn	Ferri-obertiite	Fob	Ferro-tschermakite*	Fts
Falottaite	Flt	Ferri-pedrizite	Fpd	Ferrotychite	Ftyc
Falsterite	Fls	Ferriperbøeite-(Ce)	Fpbø-Ce	Ferrovalleriite	Fval
Famatinitite*	Fam	Ferriperbøeite-(La)	Fpbø-La	Ferrovorontsovite	Fvor
Fanfaniite	Ffa	Ferriprehnite	Fprh	Ferrowodginite	Fwdg
Fangite	Fg	Ferripyrophyllite*	Fprl	Ferrowyllite	Fwyl
Fantappièite	Ftp	Ferrirockbridgeite	Frck	Ferrucite	Fru
Farneseite	Far	Ferrisanidine	Fsa	Fersmanite	Fsn
Farringtonite	Frt	Ferrisepiolite*	Fsep	Fersmite	Fsm
Fassinaite	Fas	Ferrisicklerite	Fsik	Feruvite	Fvut
Faujasite-Ca	Fau-Ca	Ferri-strunzite	Fstz	Fervanite	Fvn
Faujasite-Mg	Fau-Mg	Ferrisurite	Fsur	Fetiasite	Fet
Faujasite-Na	Fau-Na	Ferri-symplectite	Fsym	Fettelite	Ftt
Faustite	Fst	Ferrivauxite	Fvx	Feynmanite	Fey
Favreaultite	Fav	Ferri-winchite	Fwnc	Fianelite*	Fnl
Fayalite*	Fa	Ferro-actinolite	Fact	Fibroferrite	Ffr
Fedorite*	Fdr	Ferroalluaudite*	Fald	Fichtelite	Fic
Fedorovskite	Fdo	Ferroaluminoceladonite*	Facel	Fiedlerite	Fie
Fedotovite	Fdt	Ferro-anthophyllite*	Fath	Fiemmeite	Fmm
Fehrite	Feh	Ferrobobfergusonite	Fbfg	Filatovite	Ftv
Feiite	Fei	Ferrobustamite	Fbst	Filipstadite	Fps
Feinglosite	Fgl	Ferrocapholite*	Fcar	Fillowite	Fil
Feitknechtite*	Fkn	Ferroceladonite*	Fcel	Finchite	Fin
Feklichevite	Fek	Ferrochiavennite	Fcve	Fingerite	Fgr
Felbertalite	Fbt	Ferro-edenite*	Fed	Finnemanite	Fnn
Feldspar*	Fsp	Ferroefremovite	Fefr	Fischesserite*	Fis
Felsőbányaite	Fsb	Ferroericssonite	Fers	Fivegite	Fiv
Fenaksite	Fnk	Ferro-ferri-fluoro-leakeite	Fflk	Fizélyite*	Fiz

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Flagstaffite	Fsf	Fluor-tsilaisite	Ftl	Gageite	Gge
Flamite	Fmt	Fluor-uvite	Fluvt	Gahnite*	Ghn
Fleetite	Fle	Fluorvesuvianite	Fves	Gaidonnayite	Gdn
Fleischerite	Fsh	Fluorwavellite	Fwav	Gaidunningite	Gai
Fleisstalite	Fss	Flurlite	Flu	Gainesite	Gns
Fletcherite	Ftc	Foggite	Fgg	Gaitite	Gt
Flinkite	Fln	Fogoite-(Y)	Fog-Y	Gajardoite	Gaj
Flinteite	Fnt	Foite*	Foi	Galaxite*	Glx
Florcencite-(Ce)	Flo-Ce	Folvikite	Fvk	Galeaclolusite	Gcl
Florcencite-(La)	Flo-La	Fontanite	Ftn	Galeite	Gle
Florcencite-(Nd)	Flo-Nd	Fontarnauite	Fon	Galena*	Gn
Florcencite-(Sm)	Flo-Sm	Foordite	Foo	Galenobismutite	Gbit
Florenskyite	Fsk	Footemineite	Ftm	Galgenbergite-(Ce)	Ggb-Ce
Florensovite	Frs	Forêtite	Frê	Galileiite	Gll
Flörkeite	Flö	Formanite-(Y)	Frm-Y	Galkhaite	Gkh
Fluckite	Fck	Formicaite	Fmc	Galliskite	Glk
Fluellite	Fll	Fornacite	For	Gallite*	Gal
Fluoborite	Fbo	Forsterite*	Fo	Gallobeurantite	Gbdn
Fluocerite-(Ce)	Fcrt-Ce	Foshagite*	Fos	Galloplumbogummite	Gpbg
Fluocerite-(La)	Fcrt-La	Fougèrite	Fgè	Galuskinite	Gkn
Fluorannite	Fann	Fourmarierite	Fmr	Gamagarite	Gam
Fluorapatite*	Fap	Fowlerite	Fwl	Gananite	Gan
Fluorapophyllite-(Cs)*	Fapo-Cs	Fraipontite*	Fpt	Ganomallite	Gnm
Fluorapophyllite-(K)*	Fapo-K	Francevillite	Fvl	Ganophyllite*	Gnp
Fluorapophyllite-(Na)*	Fapo-Na	Franciscanite	Fcc	Ganterite*	Gtr
Fluorapophyllite-(NH₄)*	Fapo-NH ₄	Francisite	Fcs	Gaotaiite	Gao
Fluorarrojadite-(BaFe)	Fajd-BaFe	Franckeite	Fke	Garnet*	Grt
Fluorarrojadite-(BaNa)	Fajd-BaNa	Francoanellite	Fan	Garavellite*	Grv
Fluorbarytolamprophyllite	Fblmp	Françoisite-(Ce)	Frc-Ce	Garmite	Grm
Fluorbritholite-(Ce)	Fbri-Ce	Françoisite-(Nd)	Frc-Nd	Garrelsite	Grr
Fluorbritholite-(Y)	Fbri-Y	Franconite	Fra	Garronite-Ca	Grn-Ca
Fluor-buergerite	Fbu	Frankamenite	Fkm	Garronite-Na	Grn-Na
Fluorcalciobrihtholite	Fcbri	Frankdicksonite	Fds	Gartrellite	Gtl
Fluorcalciomicrolite	Fcmic	Frankhawthorneite	Fht	Garutiite	Gar
Fluorcalciopyrochlore	Fcpcl	Franklinfurnaceite*	Fkf	Garyansellite	Gas
Fluorcalcioroméite	Fcrm	Franklinite*	Frk	Gasparite-(Ce)	Gsp-Ce
Fluorcanasite	Fcns	Franklinphilit*	Fkp	Gasparite-(La)	Gsp-La
Fluorcaphite	Fcp	Fransoletite	Fsl	Gaspéite	Gpé
Fluorcarletonite	Fcto	Franzinite	Frz	Gatedalite	Gtd
Fluorcarmoite-(BaNa)	Fcm-BaNa	Freboldite	Fbd	Gatehouseite	Ghs
Fluorchegemite	Fcgm	Fredrikssonite	Fdk	Gatelite-(Ce)	Gat-Ce
Fluor-dravite	Fdrv	Freedite	Fre	Gatewayite	Gwy
Fluor-elbaite	Felb	Freibergite	Fb	Gatumbaite	Gtb
Fluorellestadite*	Fel	Freieslebenite	Flb	Gaufroyite	Gfy
Fluorite	Flr	Freitalite	Fta	Gaultite	Gau
Fluorkyuygenite	Fky	Fresnoite	Fno	Gauthierite	Gut
Fluorlamprophyllite	Fllmp	Freudenbergite	Fdb	Gayite	Gy
Fluor-liddicoatite	Fld	Friedelite*	Fdl	Gaylussite	Gyl
Fluorluanshiweiite	Flw	Friedrichbeckeite*	Fri	Gazeevite	Gaz
Fluormayenite	Fmy	Friedrichite*	Frd	Gearsutite	Gak
Fluornatrocoulsellite	Fnc	Fritzscheite	Fzs	Gebhardtite	Geb
Fluornatromicrolite	Fnmic	Frohbergite*	Frb	Gedrite*	Ged
Fluornatropyrochlore	Fnpcl	Frolovite	Flv	Geerite	Gee
Fluoro-cannilloite	Fca	Frondelite*	Fnd	Geffroyite	Gef
Fluorocronite	Flc	Froodite*	Fro	Gehlenite*	Gh
Fluoro-edenite	Fled	Fuenzalidaite	Fzl	Geigerite	Ggr
Fluorokinoshtalite	Flkns	Fuettererite	Fue	Geikielite*	Gk
Fluoro-leakeite	Flk	Fukalite	Fk	Gelosaite	Gel
Fluoro-nyboite	Fnyb	Fukuchilite	Fuk	Geminite	Gem
Fluoro-pargasite	Flprg	Fulbrightite	Fbg	Gengenbachite	Gnb
Fluoro-pedrizite	Flpd	Fülöppite	Fül	Genkinite	Gki
Fluorophlogopite	Fphl	Furongite	Frg	Genplesite	Gpl
Fluoro-richterite	Flrct	Furutoebeite*	Fur	Genthelvite*	Ghv
Fluoro-riebeckite	Frbk			Geocronite	Geo
Fluoro-taramite	Fltrm	Gabrielite	Gab	Georgbarsanovite	Gba
Fluorotetraferriphlogopite	Ftphl	Gabrielsonite	Gbr	Georgbokiite	Gbk
Fluoro-tremolite	Ftr	Gadolinite-(Ce)*	Gad-Ce	Georgechaoite	Gch
Fluorwardite	Fwd	Gadolinite-(Nd)*	Gad-Nd	George-ericksenite	Gek
Fluorphosphohedyphane	Fphdy	Gadolinite-(Y)*	Gad-Y	Georgite	Gg
Fluor-schorl	Fsrl	Gagarinite-(Ce)	Gag-Ce	Georgerobinsonite	Grb
Fluorstrophite	Fstr	Gagarinite-(Y)	Gag-Y	Georgiadessite	Ggd

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Gerasimovskite	Gms	Gorbunovite	Gbv	Guettardite	Gue
Gerdtrammelite	Gtm	Gorceixite	Gcx	Gugiaite	Gug
Gerenite-(Y)	Gnt-Y	Gordaite	Gda	Guidottiite*	Gdt
Gerhardtite	Ghd	Gordonite	Gdo	Guildite	Gdi
Germanite*	Ger	Gorerite	Gor	Guilleminite	Gul
Germanocolusite	Gclu	Görgeyite	Gög	Guimarãesite	Grā
Gersdorffite-P2 ₁ 3*	Gdf-P2 ₁ 3	Gormanite*	Gm	Guite	Gui
Gersdorffite-Pa3*	Gdf-Pa3	Gortdrumite	Gdr	Gungerite	Gng
Gersdorffite-Pca2 ₁ *	Gdf-Pca2 ₁	Goryainovite	Gyv	Gunningite	Gnn
Gerstleyite	Gst	Goslarite	Gos	Günterblässite	Gbl
Gerstmannite	Gmn	Gottardiite	Gtt	Gunterite	Gun
Geschieberite	Gsb	Gottlobite	Got	Gupeiite	Gup
Getchellite	Get	Götzenite	Göz	Gurimite	Gur
Geversite	Gev	Goudeyite	Gdy	Gustavite	Gus
Ghiaraite	Ghi	Gowerite	Gow	Gutkovaite-Mn	Gko-Mn
Giacovazzoite	Gvz	Goyazite*	Goy	Guyanaite	Guy
Gianellaite	Gia	Graemite	Gmi	Gwihabaite	Gwi
Gibbsite*	Gbs	Graeserite	Gsr	Gypsum*	Gp
Giessenite	Gie	Graftonite*	Gft	Gyrolite	Gyr
Giftgrubeite	Gif	Graftonite-(Ca)	Gft-Ca	Gysinite-(Nd)	Gys-Nd
Gilalite	Gil	Graftonite-(Mn)	Gft-Mn	H	
Gillardite	Gla	Gramaccioliite-(Y)	Gmc-Y	Haapalaite	Ha
Gillespite	Gls	Grammatikopoulosite	Gmk	Hafnon	Haf
Gillulyite	Gly	Grandaite	Grd	Hagendorffite*	Hag
Gilmarite	Gmr	Grandidierite*	Gdd	Haggertyite	Hgt
Giniite	Gin	Grandreefite	Grf	Häggite	Hgg
Ginorite	Gnr	Grandviewite	Gvw	Hagstromite	Hgs
Giorgiosite	Gio	Grantsite	Gs	Haidingerite	Hdi
Giraudite-(Zn)*	Gir-Zn	Graphite*	Gr	Haigerachite	Hga
Girvasite	Gvs	Grañianite	Gtj	Haineaultite	Hnt
Gismondine*	Gis	Gratonite	Gtn	Hainite-(Y)	Hai-Y
Gittinsite	Git	Grattarolaite	Gra	Haitaite-(La)	Hti-La
Giuseppettite	Giu	Graulichite-(Ce)	Grl-Ce	Haiweeite	Hwe
Gjerdingenite-Ca	Gje-Ca	Graulichite-(La)	Grl-La	Hakite-(Hg)*	Hak-Hg
Gjerdingenite-Fe	Gje-Fe	Gravegliaite	Gvg	Halamishite	Hla
Gjerdingenite-Mn	Gje-Mn	Grayite	Gry	Håleniusite-(La)	Hål-La
Gjerdingenite-Na	Gje-Na	Grechishchevite	Gcv	Halilsarpite	Hsp
Gladite*	Gld	Greenalite*	Gre	Halite*	Hi
Gladiusite	Gds	Greenlizardite	Glz	Hallimondite	Hll
Gladkovskyite	Gkv	Greenockite*	Gnk	Halloysite-10Å*	Hly-10Å
Glagolevite*	Ggl	Greenwoodite	Gwd	Halloysite-7Å*	Hly-7Å
Glauberite	Glb	Gregoryite	Ggy	Halotrichite	Hth
Glaucocerinite	Gc	Greifensteinite	Gfs	Halurgite	Hlg
Glaucochroite	Glc	Greigite*	Grg	Hambergite	Hb
Glaucodot*	Gld	Grenmarite	Grn	Hammarite*	Hmr
Glaucosite*	Glt	Grgurcite	Ggu	Hanauerite	Hna
Glaucophane*	Gln	Griceite	Gri	Hanawaltite	Hnw
Glaukosphaerite	Gks	Grigorievite	Ggv	Hancockite	Hnc
Glikinite	Gli	Grimaldiite	Gmd	Hanjiangite	Hji
Glucine	Glu	Grimmite	Gmm	Hanksite	Hks
Glushinskite	Gsk	Grimselite	Gsl	Hannayite	Han
Gmalimite	Gma	Griphite	Gph	Hannebachite	Hbc
Gmelinite-Ca*	Gme-Ca	Grischunite	Gcn	Hansblockite	Hbk
Gmelinite-K*	Gme-K	Groatite	Goa	Hansesmarkite	Hmk
Gmelinite-Na*	Gme-Na	Grokhovskiyite	Ghy	Hapkeite	Hpk
Gobbinsite	Gbb	Grootfonteinite	Gtf	Haradaite	Hra
Gobelinite	Gob	Grossite	Gss	Hardystonite	Hdy
Godlevskite*	Go	Grossmanite	Gsm	Harkerite	Hkr
Godovikovite	God	Grossular*	Grs	Harmotome*	Hrm
Goedkenite	Goe	Grouitite*	Gro	Harmunite	Hmu
Goethite*	Gth	Grumantite	Gmt	Harrisonite	Hrs
Gold (aurum)*	Au	Grumiplucite	Gpc	Harstigite	Har
Goldfieldite*	Gf	Grundmannite	Gdm	Hartite	Hrt
Goldichite	Gol	Grunerite*	Gru	Hasanovite	Has
Goldmanite*	Glm	Gruzddevite	Gzd	Hashemite	Hsh
Goldquarryite	Gqy	Guanacoite	Gnc	Hastingsite*	Hst
Goldschmidtite	Gsc	Guanajuatite	Gj	Hatchite	Hat
Golyshevite	Gsv	Guanine	Gni	Hatertite	Htt
Gonnardite	Gon	Guarinoite	Gua	Hatrurite	Hrr
Gonyerite*	Gye	Gudmundite*	Gu	Hauchecornite	Hau
Goosecreekite	Gck	Guérinite	Gué	Hauckite	Hck

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Hauerite	Hr	Hexahydrite	Hhy	Hsianghualite	Hsi
Hausmannite*	Hsm	Hexahydroborite	Hhb	Huanghoite-(Ce)	Hho-Ce
Haüyne*	Hyn	Hexamolybdenum	Hmo	Huangite	Hua
Hawleyite	Hwl	Heyerdahlite	Hdh	Huanzalaite	Hza
Hawthorneite	Hwt	Heyite	Hyt	Hubeite	Hub
Haxonite	Hax	Heyrovskýite	Hyv	Hübnerite	Hbr
Haycockite	Hyc	Hezuolinite	Hez	Huemulite	Hml
Haydeite	Hyd	Hiärneite	Hiä	Huenite	Hue
Haynesite	Hay	Hibbingite	Hib	Hügelite	Hüg
Hazenite	Hza	Hibonite*	Hbn	Hughesite	Hug
Heamanite-(Ce)	Hea-Ce	Hibschite*	Hbs	Huizingite-(Al)	Hui-Al
Heazlewoodite	Hzl	Hidalgoite	Hid	Hulsite	Hls
Hechtsbergite	Heb	Hielscherite	Hsc	Humberstonite	Hbe
Hectorfloresite	Hfl	Hieratite	Hie	Humboldtine	Hbd
Hectorite*	Htr	Hilairite	Hlr	Humite*	Hu
Hedegaardite	Hed	Hilarionite	Hrn	Hummerite	Hum
Hedenbergite*	Hd	Hilgardite	Hgr	Hunchunite	Hcn
Hedleyite*	Hdl	Hillebrandite*	Hil	Hundholmenite-(Y)	Hhm-Y
Hedyphtane	Hdp	Hillesheimite	Hlh	Hungchaoite	Hch
Heftetjernite	Hef	Hillite	Hi	Huntite	Hun
Heideite	Hei	Hingganite-(Ce)	Hin-Ce	Hureaulite*	Hur
Heidornite	Hdn	Hingganite-(Nd)	Hin-Nd	Hurlbutite*	Hrb
Heinrichite	Hrc	Hingganite-(Y)	Hin-Y	Hutcheonite	Htn
Heisenbergite	Hsb	Hingganite-(Yb)	Hin-Yb	Hutchinsonite*	Hut
Hejmanite	Hej	Hinsdalite	Hda	Huttonite*	Ht
Heklaite	Hek	Hiortdahlite	Hio	Hyalotekite	Hya
Hellandite-(Ce)	Hld-Ce	Hiroseite	Hir	Hydrobasaluminite	Hba
Hellandite-(Y)	Hld-Y	Hisingerite*	Hsg	Hydrobiotite*	Hbt
Hellyerite	Hy	Hitachiite	Hit	Hydroboracite	Hbo
Helmutwinklerite	Hwk	Hizenite-(Y)	Hiz-Y	Hydrocalumite	Hcl
Helvine*	Hlv	Hjalmarite	Hja	Hydrocerussite	Hcer
Hematite*	Hem	Hloušekite	Hšk	Hydrochlorborite	Hcb
Hematolite	Hmt	Hocartite*	Hoc	Hydrodelhayelite	Hdhy
Hematophanite	Hph	Hochelagaite	Haga	Hydrodresserite	Hdrs
Hemihedrite	Hhe	Hodgesmithite	Hdg	Hydroglauberite	Hglb
Hemimorphite	Hmp	Hodgkinsonite	Hgk	Hydrogrossular	Hgrs
Hemleyite	Hle	Hodrušite*	Hod	Hydrohalite*	Hhl
Hemloite	Hlo	Hoelite	Hoe	Hydrohonessite*	Hhon
Hemusite*	Hm	Hoganite	Hgn	Hydrokenoelsmoreite	Hkm
Hendekasartorite	Hksat	Hogarthite	Hog	Hydrokenomicrolite	Hkmic
Hendersonite	Hdr	Högbomite*	Hög	Hydrokenopyrochlore	Hkpcl
Hendricksite*	Hds	Høgtuvaite	Htu	Hydrokenoralstonite	Hkra
Heneuite	Hn	Hohmannite	Hoh	Hydromagnesite	Hmgs
Henmilite	Hen	Holdawayite	Hdw	Hydrombobomkulite	Hmbb
Hennomartinite	Hma	Holdenite	Hde	Hydroniumjarosite	Hjrs
Henritermierite	Hri	Holfertite	Hlf	Hydroniumpharmacoalumite	Hpal
Henryite	Hry	Hollandite*	Hol	Hydroniumpharmacosiderite	Hpsd
Henrymeyerite*	Hmy	Hollingworthite*	Hlw	Hydropascoite	Hpas
Hentschelite	Hsl	Hollisterite	Hli	Hydropyrochlore	Hpcl
Hephaistosite	Hep	Holmquistite*	Hlm	Hydromarchite	Hrom
Heptasartorite	Hsat	Holtedahlite	Htd	Hydroscarbroite	Hsca
Herbertsmithite	Her	Holtite*	Hlt	Hydrotalcite*	Htc
Hercynite*	Hc	Holtstamite	Hts	Hydroterskite	Hter
Herderite*	Hrd	Homilite	Hom	Hydrotungstite	Htgs
Hereroite	Hre	Honeaitite	Hne	Hydrowoodwardite	Hwwd
Hermannjahnite	Hjh	Honessite*	Hon	Hydroxyapophyllite-(K)	Hapo-K
Hermannroeseite	Hro	Hongheite	Hgh	Hydroxycalciumicrolite	Hcmic
Herzenbergite	Hzb	Hongshiite	Hng	Hydroxycalcio-pyrochlore	Hcpcl
Hessite*	Hes	Honzaitite	Hzt	Hydroxycalcioroméite	Hcr
Hetaerolite	Hta	Hopeite	Hop	Hydroxycancrinite	Hccn
Heterogenite	Htg	Horákite	Hor	Hydroxyferroroméite	Hfr
Heteromorphite	Htm	Hornblende*	Hbl	Hydroxykenoelsmoreite	Hykm
Heterosite*	Het	Hörnesite*	Hns	Hydroxykenomicrolite	Hykmic
Heulandite-Ba*	Hul-Ba	Horomanite	Hmn	Hydroxykenopyrochlore	Hykpcl
Heulandite-Ca*	Hul-Ca	Horváthite-(Y)	Hrv-Y	Hydroxylapatite*	Hap
Heulandite-K*	Hul-K	Hotsonite	Hot	Hydroxylbastnäsite-(Ce)	Hbsn-Ce
Heulandite-Na*	Hul-Na	Housleyite	Hou	Hydroxylbastnäsite-(Nd)	Hbsn-Nd
Heulandite-Sr*	Hul-Sr	Howardévansite	Hdv	Hydroxylborite	Hyb
Hewettite	Hew	Howieite*	Hw	Hydroxylchondrodite	Hchn
Hexacelsian	Hcls	Howlite	How	Hydroxylclinohumite	Hchu
Hexaferrum	Hfe	Hrabákite	Hbá	Hydroxylgedrite	Hegr

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Hydroxyllellstadite*	Hel	Irinarassite	Inr	Jeankempite	Jkp
Hydroxylgugiaite	Hgug	Iron (<i>ferrum</i>)*	Fe	Jedwabite	Jed
Hydroxylhedyphane	Hhdy	Irtyschite	Irt	Jeffbenite	Jef
Hydroxylherderite*	Hhd	Iseite	Is	Jeffreyite	Jfy
Hydroxylpyromorphite	Hpm	Ishiharaite*	Ish	Jennite*	Jnn
Hydroxylwagnerite	Hwag	Ishikawaite	Ikwa	Jensenite	Jen
Hydroxymanganopyrochlore	Hmpcl	Isoclasite	Icl	Jentschite	Jts
Hydroxymcglanstonite-(K)	Hmg	Isocubanite	Icb	Jeppite	Jep
Hydroxynatropyrochlore	Hnpcl	Isoferroplatinum	lfpt	Jeremejevite	Jer
Hydroxylumbopyrochlore	Hppcl	Isokite	Iso	Jerrygibbsite	Jgb
Hydrozincite	Hznc	Isolueshite	Isl	Jervisite	Je
Hylbrownite	Hbw	Isomertieite*	Ism	Ježekite	Jež
Hypercinnabar	Hcin	Isovitite	Isv	Jianshuiite	Jia
Hyršlite	Hyr	Isselite	Iss	Jimboite	Jbo
Hyttsjöite	Hyj	Itelmenite	ltm	Jimthompsonite*	Jim
I		Itoigawaite	Ito	Jingsuiite	Ji
Ianbruceite	Ibc	Itoite	It	Jinshajiangite	Jsh
Iangreyite	Igy	Itsiite	Its	Jixianite	Jix
Ianthinite	Ian	Ivanyukite-Cu	Iv-Cu	Joanneumite	Joa
Ice	Ice	Ivanyukite-K	Iv-K	Joaquinite-(Ce)	Jq-Ce
Ice-VII	Ice-VII	Ivanyukite-Na	Iv-Na	Joegoldsteinite	Jgs
Ichnusaite	Ich	Ivsite	Ivs	Joëlbruggerite	Jbg
Icosahedrite	Ihd	Iwashiroite-(Y)	Iwa-Y	Joesmithite*	Joe
Idaite*	Ida	Iwateite	Iw	Johachidolite	Jhd
Idrialite	Id	Ixiolite	Ix	Johanngeorgenstadtite	Jgg
Imoriite-(Y)	im-Y	Iyoite	Iy	Johannite	Jh
Ikaite	Ika	Izoklakeite	Iz	Johannsenite*	Jhn
Ikranite	Ikr	J		Johillerite	Jhl
Ikunolite*	Ik	Jáchymovite	Jác	Johnbaumite	Jbm
Illesite	Ile	Jacobsite	Jcb	Johninnesite	Jin
Ilímaussite-(Ce)	Ilí-Ce	Jacquesdietrichite	Jdt	Johnkoivulaite	Joh
Ilinskite	Isk	Jacutingaite	Jac	Johnsenite-(Ce)	Jsn-Ce
Ilirneyite	Ily	Jadarite	Jad	Johnsomervilleite*	Jsv
Illite*	Ilt	Jadeite*	Jd	Johntomaite	Jtm
Ilmajokite-(Ce)	Ijk-Ce	Jaffeite	Jaf	Johnwalkite	Jwk
Ilmenite*	Ilm	Jagoite	Jg	Jōkokuite	Jōk
Ilsemannite	Ils	Jagowerite	Jgw	Joliotite	Jol
Itisite	Iti	Jagüéite*	Jag	Jolliffeite	Jlf
Ilvaite*	Ilv	Jahnsite-(CaFeMg)	Jah-CaFeMg	Jonassonite*	Jo
Ityukhinite	Ily	Jahnsite-(CaMnFe)	Jah-CaMnFe	Jonesite	Jon
Imandrite	Ima	Jahnsite-(CaMnMg)	Jah-CaMnMg	Joosteite	Joo
Imayoshiite	Iys	Jahnsite-(CaMnMn)	Jah-CaMnMn	Jordanite*	Jrd
Imhofite	Imh	Jahnsite-(CaMnZn)	Jah-CaMnZn	Jordisite	Jds
Imiterite	Imi	Jahnsite-(MnMnFe)	Jah-MnMnFe	Jørgensenite	Jør
Imogolite*	Imo	Jahnsite-(MnMnMg)	Jah-MnMnMg	Jörgkellerite	Jgk
Inaglyite	Ina	Jahnsite-(MnMnMn)	Jah-MnMnMn	Joséite-A	Js-A
Incomsartorite	Isat	Jahnsite-(MnMnZn)	Jah-MnMnZn	Joséite-B*	Js-B
Inderborite	Ibo	Jahnsite-(NaFeMg)	Jah-NaFeMg	Joteite	Jot
Inderite	Idr	Jahnsite-(NaMnMg)	Jah-NaMnMg	Jouravskite	Jou
Indialite	Ind	Jahnsite-(NaMnMn)	Jah-NaMnMn	Juabite	Jua
Indigirite	Idg	Jaipurite	Jai	Juangodoyite	Jgd
Indite	Idt	Jakobssonite	Jak	Juanitaite	Jni
Indium	In	Jalpaite	Jal	Juanite	Jn
Inesite*	Ins	Jamborite	Jbr	Juansilvaite	Jsl
Ingersonite	Igs	Jamesite	Jms	Julgoldite-(Fe ²⁺)*	Jul-Fe ²⁺
Ingodite*	Ing	Jamesonite*	Ja	Julgoldite-(Fe ³⁺)*	Jul-Fe ³⁺
Innelite	Inn	Janchevite	Jan	Julgoldite-(Mg)*	Jul-Mg
Innsbruckite*	Ibk	Janggumite	Jgn	Julienite	Jln
Insizwaite	Isw	Janhaugite	Jhg	Jungite	Jun
Intersilite	Isti	Jankovičite	Jkv	Junitoite	Jit
Inyoite	Iyo	Jarandolite	Jdo	Junoite*	Jnt
Iodargyrite	Iag	Jarlite	Jar	Juonniite	Juo
Iowaite*	Jarosewicheite	Jrw	Jurbanite	Jur	
Iquiqueite	Jarosite*	Jrs	Jusite	Ju	
Iranite	Irn	Jaskólskiite	Jks	K	
Iraqite-(La)	Irq-La	Jasmondite	Jas	Kaatialaite	Kaa
Irsarsite*	Irs	Jasonsmithite	Jsm	Kadyrelite	Kad
Irhtemite	Irh	Jasrouxite	Jrx	Kaersutite*	Krs
Iridarsenite	Ird	Jaszczakite	Jzz	Kahlenbergite	Klb
Iridium*	Ir	Javorieite	Jav	Kahlerite	Kah
Iriginite	Irg	Jeanbandyite	Jbd	Kainite	Kai

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Kainosite-(Y)	Kno-Y	Kegginite	Kgn	Kirschsteinite*	Kir
Kainotropite	Ktr	Keilite*	Ke	Kishonite	Kis
Kaitianite	Ktn	Keithconnite	Kei	Kitagoite	Kgh
Kalborsite	Kbs	Keiviite-(Y)	Kvi-Y	Kitkaite	Kk
Kaligoorlieite	Kgl	Keiviite-(Yb)	Kvi-Yb	Kittatinnyite	Kit
Kaliborite	Kbo	Keldyshite	Kel	Kladnoite	Kdn
Kalicinite	Kcn	Kellyite*	Kly	Klajite	Klj
Kalifersite*	Klf	Kelyanite	Kyn	Klaprothite	Kpr
Kalininite	Kal	Kemmlitzite	Kml	Klebensbergite	Kbb
Kalinite	Kli	Kempite	Kp	Kleberite	Kbr
Kaliochalcite	Kch	Kenhsuite	Khs	Kleemanite	Klm
Kaliophilite	Klp	Kenngottite	Kgt	Kleinite	Kle
Kalistrontite	Kst	Kenoargentotennantite-(Fe)	Katnt-Fe	KLöchite*	KLö
Kalithallite	Kth	Kenoargentotetrahedrite-(Fe)	Kattr-Fe	Klockmannite*	Kl
Kalsilite*	Kls	Kenoargentotetrahedrite-(Zn)	Kattr-Zn	Klyuchevskite	Kyv
Kalungaite	Klu	Kenoplumbomicrolite	Kpmic	Knasibfite	Ksf
Kamaishilite	Kam	Kenotobermorite	Ktbm	Knorringite	Krr
Kamarizaitite	Kmr	Kentbrooksite*	Ktb	Koashvite	Koa
Kambaldaite	Kbd	Kentrolite	Ken	Kobeite-(Y)	Kob-Y
Kamchatkite	Kmc	Kenyaite	Kya	Kobellite	Kbl
Kamenevite	Kne	Keplerite	Kep	Kobokoboite	Kbk
Kamiokite	Kmk	Kerimasite	Kms	Kobyshevite	Kby
Kamitugaite	Ktg	Kermesite*	Kem	Kochite	Koh
Kamotoite-(Y)	Kmt-Y	Kernite	Ker	Kochkarite	Koc
Kampelite	Kpl	Kernowite	Knw	Kochsándorite	Ksd
Kampfite	Kpf	Kerolite*	Krl	Kodamaite	Kod
Kamphaugite-(Y)	Khg-Y	Kesebolite-(Ce)	Ksb-Ce	Koehlinite	Kcl
Kanemite	Knm	Kësterite	Kës	Koenenite	Koe
Kangite	Kg	Kettnerite	Ket	Kogarkoite	Kog
Kaňkite*	Kňk	Keutschite	Keu	Kojonenite	Koj
Kannanite	Kna	Keyite	Key	Kokchetavite	Kct
Kanoite	Knt	Keystoneite	Kys	Kokinosite	Kkn
Kanonaite*	Kan	K-feldspar*	Kfs	Koksharovite	Kok
Kanonerovite	Knr	Khademite	Kdm	Koktaite	Kkt
Kaolin*	Kn	Khaidarkanite	Kdk	Kolarite	Kla
Kaolinite*	Kln	Khamrabaevite	Krb	Kolbeckite	Kbe
Kapellasite	Kap	Khanneshite	Kha	Kolfanite	Kfn
Kapitsaite-(Y)	Ksa-Y	Kharaelakhite	Klh	Kolicite	Kol
Kapundaite	Kpd	Khatyrkite	Ktk	Kolitschite	Klt
Kapustinite	Kpu	Khesinite	Khe	Kollerite	Klr
Karasugite	Krg	Khibinskite	Khi	Kolovratite	Klv
Karchevskyite	Kcv	Khinite	Khn	Kolskyite	Ksy
Karelianite*	Kar	Khmaralite	Kma	Kolwezite	Kwz
Karenwebberite	Kwb	Khomyakovite	Kmy	Kolymite	Kym
Karibibite	Kab	Khorixasite	Kho	Komarovite	Kmv
Karlite	Ka	Khrenovite	Khr	Kombatite	Kb
Karnasurtite-(Ce)	Ksu-Ce	Khristovite-(Ce)	Kh-Ce	Komkovite	Kkv
Karpenkoite	Kpk	Khurayyimitite	Khu	Konderite	Kdr
Karpinskite	Kpi	Khvorovite	Khv	Koninckite	Kon
Karpovite	Kpv	Kiddcreekite	Kck	Kononovite	Knv
Karupmøllerite-Ca	Kmø-Ca	Kidwellite	Kdw	Konyaite	Kny
Kasatkinitite	Ksk	Kieftite	Kie	Koragoite	Kgo
Kashinite	Ksh	Kieserite	Ksr	Koritnigite	Kor
Kaskasite	Kks	Kihlmanite-(Ce)	Kih-Ce	Kornelite	Knl
Kasolite	Kso	Kilchoanite	Ki	Kornerupine*	Krn
Kassite	Kas	Killalaite*	Kil	Korobitsynite	Kbi
Kastningite	Kng	Kimrobinsonite	Kim	Korshunovskite	Kss
Katayamalite	Kyl	Kimuraite-(Y)	Kmu-Y	Koryakite	Kyk
Katerinopoulosite	Kpo	Kimzeyite*	Kmz	Korzshinskite	Kzh
Katiarsite	Kts	Kingite	Kgi	Kosmochlor*	Kos
Katoite*	Kto	Kingsgateite	Kgg	Kosnarite	Ksn
Katophorite*	Ktp	Kingsmountite	Kmo	Kostovite	Ktv
Katoptrite	Ktt	Kingstonite	Kgs	Kostylevite	Ksv
Katsarosite	Kat	Kinichillite	Kni	Kotoite	Ko
Kawazulite	Kaw	Kinoite	Kin	Kottenheimite	Khm
Kayrobertsonite	Kay	Kinoshitalite*	Kns	Köttigite	Köt
Kazakhstanite	Kaz	Kintoreite	Kt	Kotulskite	Ktu
Kazakovite	Kzk	Kipushite	Kip	Koutekite	Kou
Kazanskyite	Kzs	Kircherite	Kcr	Kovdorskite	Kov
Keckite	Kec	Kirchhoffite	Khf	Kozoite-(La)	Koz-La
Kegelite	Keg	Kirkiite*	Krk	Kozoite-(Nd)	Koz-Nd

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Kozyrevskite	Kzy	Kyanoxalite	Kox	Lavoisierite	Lvo
Kraisslite	Ksl	Kyawthuite	Kyw	Lavrentievite	Lvr
Krashennikovite	Krh	Kyrgyzstanite	Kyr	Lawrencite	Law
Krásnoite	Krá	Kyzylkumite	Kyz	Lawsonbauerite	Lwb
Krasnoshteinite	Knh	L		Lawsonite*	Lws
Krasnovite	Kv	Laachite	Laa	Lazaraskeite	Lza
Kratochvilite	Ktc	Labuntsovite-Fe	Lab-Fe	Lazarenkoite	Laz
Krausite	Ksi	Labuntsovite-Mg	Lab-Mg	Lazaridisite	Lrd
Krauskopffite	Kkp	Labuntsovite-Mn	Lab-Mn	Lazulite*	Lzl
Krautite	Kra	Labyrinthite	Lby	Lazurite*	Lzr
Kravtsovite	Kvt	Lacroixite	Lac	Lead (<i>plumbum</i>)*	Pb
Kreiterite	Kre	Laffittite	Lft	Leadamalgam	Lam
Kremersite	Km	Lafammeite	Lfl	Leadhillite	Lhi
Krennerite*	Knn	Laforête*	Laf	Lechatelierite	Lch
Krettnichite	Knc	Lafossaite	Lfs	Lecontite	Lcn
Kribergite	Kbg	Lagalyite	Lag	Lecoqite-(Y)	Lec-Y
Krieselite	Kes	Lahnsteinite	Lah	Leesite	Lee
Krinovite	Kvi	Laihunite	Lai	Lefontite	Lef
Kristiansenite	Kse	Laitakarite*	Ltk	Legrandite	Leg
Krivovichevite	Kvv	Lakargiite	Lak	Leguernite	Lg
Kröhnkite	Khk	Lakebogaite	Lbg	Lehmannite	Leh
Krotite	Kro	Lalondeite	Lal	Lehnerite	Lh
Kroupaite	Kpa	Lammerite	Lmr	Leifite	Lf
Kruijenite	Kje	Lammerite-β	Lmr-β	Leightonite	Lgh
Krupičkaite	Kpč	Lamprophyllite*	Lmp	Leisingite	Lei
Krupkaite*	Krp	Lanarkite*	Lan	Leiteite	Lt
Krut'aita*	Krt	Landauite	Lda	Lemanskiite	Lmk
Krutovite	Kru	Landesite	Lds	Lemmleinite-Ba	Lem-Ba
Kryachkoite	Kyh	Långbanite	Lgb	Lemmleinite-K	Lem-K
Kryzhanovskite*	Kry	Långbanshyttanite	Lbs	Lemoynite	Lmo
Ktenasite	Kte	Langbeinite	Lbn	Lenaite	Ln
Kuannersuite-(Ce)	Kua-Ce	Langhofite	Lhf	Lengenbachite	Len
Kudriavite	Kdv	Langisite	Lgi	Leningradite	Lng
Kudryavtsevaite	Kud	Langite*	Lgt	Lennilenapeite*	Lnl
Kufahrte	Kuf	Lanmuchangite	Lmh	Lenoblite	Lnb
Kukharenkoite-(Ce)	Kkk-Ce	Lannonite	Lnn	Leogangite	Lgg
Kukharenkoite-(La)	Kkk-La	Lansfordite	Lfd	Leonardsenite	Lnd
Kukisvumite	Kki	Lanthanite-(Ce)	Ltn-Ce	Leonite	Leo
Kuksite	Kuk	Lanthanite-(La)	Ltn-La	Leószilárdite	Lsz
Kulanite	Kul	Lanthanite-(Nd)	Ltn-Nd	Lepageite	Lep
Kuliginite	Klg	Lapeyreite	Lpy	Lepersonnite-(Gd)	Lps-Gd
Kuliokite-(Y)	Klo-Y	Laphamite	Lpm	Lepidocrocite*	Lpc
Kulkeite*	Klk	Lapieite	Lap	Lepidolite*	Lpd
Kullerudite	Krd	Laplandite-(Ce)	Lpl-Ce	Lepkhenelmitite-Zn	Lpn-Zn
Kumdykolite	Kdy	Laptevitte-(Ce)	Lpt-Ce	Lermontovite	Ler
Kummerite	Kum	Larderellite	Ldr	Letovicite	Let
Kumtyubeite	Kty	Larisaitite	Ls	Leucite*	Lct
Kunatite	Kun	Larnite*	Lrn	Leucophanite	Lph
Kupčikite*	Kup	Larosite	Lar	Leucophoenicite	Lpo
Kupletskite*	Kpt	Larsenite	Lsn	Leucophosphite	Lpp
Kupletskite-(Cs)	Kps-Cs	Lasalite	Las	Leucosphenite	Lsp
Kuramite*	Ku	Lasnierite	Lnr	Leucostaurite	Lsr
Kuranakhite	Kkh	Latiomite	Lat	Levante	Lev
Kuratite	Kur	Latrappite*	Ltp	Leverettite	Lve
Kurchatovite	Kht	Laueite	Lae	Levinsonite-(Y)	Lvi-Y
Kurgantaite	Kga	Laumontite*	Lmt	Lévyclaudite*	Lvc
Kurilite	Kri	Launayite*	Lau	Lévyne-Ca	Lév-Ca
Kurnakovite	Kko	Lauraniite	Lra	Lévyne-Na	Lév-Na
Kurumsakite	Krm	Laurelite	Lrl	Leydetite	Ley
Kusachiite	Kus	Laurentianite	Lre	Liandratite	Lia
Kushiroite	Ks	Laurentthomasite	Ltm	Liberite	Lbr
Kutinaite	Kti	Laurionite	Lri	Libethenite*	Lib
Kutnohorite*	Kut	Laurite*	Lrt	Liebauite	Lie
Kuvaevite	Kuv	Lausenite	Lse	Liebenbergite	Lbb
Kuzelite	Kuz	Lautarite	Ltr	Liebermannite	Lbm
Kuzmenkoite-Mn	Kz-Mn	Lautenthalite	Lth	Liebigite	Lbi
Kuzmenkoite-Zn	Kz-Zn	Lautite*	Ltt	Likasite	Lik
Kuzminite	Kzm	Lavendulan	Lvd	Lileyite	Lly
Kuznetsovite	Kzn	Lávenite	Láv	Lillianite*	Lil
Kvanefjeldite	Kva	Laverovite	Lvv	Lime	Lm
Kyanite*	Ky	Lavinskyite	Lvs	Limousinite	Lms

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Linarite	Lna	Lucchesiite	Lcc	Magnesioleydetite	Mley
Lindackerite	Ldk	Luddenite	Ldd	Magneso-lucchesiite	Mlcc
Lindbergite	Ldb	Ludjibaite	Ldj	Magnesioneptunite	Mnpt
Lindgrenite	Lgr	Ludlamite*	Lud	Magnesionigerite-2N1S	Mgng-2N1S
Lindqvistite	Lqv	Ludlockite	Ldl	Magnesionigerite-6N6S	Mgng-6N6S
Lindsleyite	Ldy	Ludwigite	Ldw	Magnesiopascoite	Mpas
Lindströmite	Lsm	Lueshite*	Lue	Magnesio-riebeckite*	Mrbk
Línkite	Lnk	Luetheite	Lut	Magnesiorowlandite-(Y)	Mrow-Y
Lingbaoite	Lb	Luiinite-(OH)	Lui-OH	Magnesiostaurolite*	Mst
Lingunite	Lgn	Lukechangite-(Ce)	Luk-Ce	Magnesiotaaffeite-2N'2S	Mtf-2N'2S
Linnaeite*	Lin	Lukkulaisvaaraite	Lkk	Magnesiotaaffeite-6N'3S	Mtf-6N'3S
Lintisite	Lts	Lukrahnite	Lkr	Magnesiovesuvianite	Mves
Linzhiite	Lzh	Lulzacite	Lul	Magnesiovoltaite	Mvlt
Liottite	Lio	Lumsdenite	Lum	Magnesiozippeite	Mzip
Lipscombite*	Lcb	Lüneburgite	Lbu	Magnesite*	Mgs
Lipuite	Lp	Lunijianlaite	Lji	Magnetite*	Mag
Liraitite	Lir	Lun'okite	Lun	Magnetoplumbite	Mpl
Liroconite	Lro	Luobusaite	Luo	Magnioursilite	Mau
Liselite	Lis	Luogufengite	Lgf	Magnolite	Mno
Lishizhenite	Lsh	Lusernaite-(Y)	Lus-Y	Magnussonite	Mnu
Lisiguangite	Lsg	Lussierite	Lsi	Mahnertite	Mah
Lisitsynite	Lss	Luxembourgitte	Lux	Maiikainite	Mai
Liskeardite	Lsk	Luzonite*	Luz	Majakite	Mjk
Liskirchnerite	Lkn	Lyonsite	Lyo	Majindeite	Mjd
Litharge	Lit	M		Majorite*	Maj
Lithiomarsturite	Lmsr	Macaulayite	Mcy	Majzlanite	Mjz
Lithiophilite	Lhp	Macdonaldite	Mcd	Makarochkinite	Mkr
Lithiophorite*	Lpr	Macedonite	Mce	Makatite	Mkt
Lithiophosphate	Lip	Macfallite	Mcf	Mäkinenite	Mkn
Lithioantite	Ltan	Machatschkiite	Mct	Makotoite	Mako
Lithiowodginite	Lwdg	Machiite	Mci	Makovickyite	Mvk
Lithosite	Lho	Mackayite	Mky	Malachite*	Mlc
Litidionite	Ltd	Mackinawite*	Mkw	Malanite	Mla
Litochlebite	Lto	Macphersonite	Mps	Malayaite	Mly
Litvinskite	Ltv	Macquartite	Mcq	Maldonite	Mdo
Liudongshengite	Ldh	Madocite	Mdc	Maleevite	Mle
Liuite	Liu	Magadiite*	Mgd	Maletovyayamite	Mty
Liveingite	Liv	Magbasite	Mgb	Malhmoodite	Mmo
Liversidgeite	Lsd	Maghagendorfite	Mhag	Malinkoite	Mlk
Livingstonite	Lst	Maghemite*	Mgh	Malladrite	Mld
Lizardite*	Lz	Maghrebite	Mhb	Mallardite	Mal
Llantenesite	Lla	Magnanelliite	Mgn	Mallestigite	Mlg
Lobanovite*	Lbv	Magnesoalterite	Matr	Malyshevite	Mys
Lokkaite-(Y)	Lok-Y	Magnesio-arfvedsonite*	Marf	Mambertiite	Mam
Löllingite*	Lö	Magnesioaubertite	Maub	Mammothite	Mm
Lombardoite	Lmb	Magnesioeltrandoite-2N3S	Mbt-2N3S	Manaevite-(Ce)	Mv-Ce
Lomonosovite	Lom	Magnesiobermanite	Mbrm	Manaksite	Mnk
Londonite*	Ldn	Magnesiocanutite	Mcan	Manandonite*	Mnd
Lonecreekite	Lck	Magnesioacropholite*	Mcar	Mandarinoite	Mda
Lonsdaleite	Lon	Magnesiochloritoid	Mclt	Maneckite	Mnc
Loparite-(Ce)*	Lop-Ce	Magnesiochlorophoenicite	Mcpo	Manganarsite*	Mna
Lopatkaite	Lpk	Magnesiochromite*	Mchr	Manganabingtonite	Mbab
Lópezite	Lpz	Magnesiocopiapite	Mcpi	Manganbelyankinite	Mbyn
Lorándite	Lor	Magnesioacoulsonite	Mcou	Manganberzelite	Mbzl
Loranskite-(Y)	Lrs-Y	Magnesiodumortierite	Mdum	Manganflurlite	Mflu
Lorenzenite	Lrz	Magnesio-ferri-fluoro-hornblende	Mffhbl	Mangangordonite	Mgdo
Losseyite	Los	Magnesioferrite*	Mfr	Manganhumite	Mnhu
Lotharmeyerite	Lmy	Magnesiofluckite	Mfck	Manganiakasaite-(La)	Mnak-La
Loudounite	Ldo	Magnesio-fluoro-arfvedsonite	Mfarf	Manganandrosite-(Ce)	Mna-Ce
Loughlinite*	Lou	Magnesio-fluoro-hastingsite	Mfst	Manganandrosite-(La)	Mna-La
Lourensalsite	Lrw	Magnesio-foitite	Mfoi	Manganiceladonite	Mcel
Lovdarite	Lov	Magnesio-hastingsite	Mhst	Mangani-dellaventuraite	Mdv
Loveringite	Lvg	Magnesiohaterite	Mhtt	Manganilvaite*	Mlv
Lovozerite	Lvz	Magnesiohögbomite-2N2S	Mhög-2N2S	Mangani-obertiite	Mob
Löweite	Löw	Magnesiohögbomite-2N3S	Mhög-2N3S	Mangani-pargasite	Mprg
Luanheite	Lua	Magnesiohögbomite-2N4S	Mhög-2N4S	Manganite*	Mnn
Luanshweiite	Lsw	Magnesiohögbomite-6N12S	Mhög-6N12S	Manganlotharmeyerite	Mlmy
Luberoite	Lub	Magnesiohögbomite-6N6S	Mhög-6N6S	Manganooarrojadite-(KNa)	Majd-KNa
Luboržákite	Lbz	Magnesio-hornblende	Mhbl	Manganobadalovite	Mbdl
Lucabindiite	Lbd	Magnesiohulsite	Mhul	Manganoblödite	Mblö
Lucasite-(Ce)	Lca-Ce	Magnesiokoritnigite	Mkor	Manganochromite	Mnchr

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Manganoeudialyte	Meud	Matteuccite	Mtt	Mengxianminite	Mgx
Mangano-ferri-eckermannite	Mfeck	Mattheddleite	Mhd	Meniaylovite	Myl
Manganohörsesite	Mhns	Matulaite	Mat	Menshikovite*	Mnv
Manganokaskasite	Mkks	Matyhite	Myh	Menzerite-(Y)	Mzr-Y
Manganokhomyakovite	Mkmy	Maucherite	Muc	Mercallite	Mec
Manganokukisvumite	Mkki	Mauriziodiniite	Mzd	Mercury (<i>hydrargyrum</i>)*	Hg
Manganolangbeinite	Mlgb	Mavlyanovite	Mav	Mereheadite	Mrh
Mangano-mangani-ungarettiite	Mmu	Mawbyite	Mby	Mereiterite	Mtr
Manganonaujakasite	Mnj	Mawsonite*	Maw	Merelaniite	ML
Manganoneptunite	Mnnpt	Maxwellite	Max	Merenskyite*	Mrk
Manganonordite-(Ce)	Mnor-Ce	Mayingite	Myg	Meridianiite	Mdn
Manganooquadratite	Mqd	Mazzettiite	Mzt	Merlinoite	Mrl
Manganosegelerite	Msgl	Mazite-Mg	Maz-Mg	Merrihuieite	Mhu
Manganosite*	Mng	Mazite-Na	Maz-Na	Merrillite	Mer
Manganostibite	Mnsb	Mbobomkulite	Mbb	Mertieite-I	Met-I
Manganotychite	Mtyc	Mcallisterite	Mcl	Mertieite-II	Met-II
Manganovesuvianite	Mnves	Mcalpineite	Map	Merwinite*	Mw
Mangazeite	Mgz	Mcauslanite	Mas	Mesaite	Msa
Manitobaite	Mtb	Mcbirneyite	Mbn	Mesolite*	Mes
Manjiroite*	Mji	Mcconnellite	Mc n	Messelite	Msl
Mannardite	Man	Mccrillisite	Mcr	Meta-aluminite	Ma
Mansfieldite	Mfd	Mcgillite*	Mcg	Meta-alunogen	Malg
Mantienneite	Mtin	Mcgovernite	Mgv	Meta-ankoleite	Mak
Maohokite	Mhk	Mcguinnessite	Mgu	Meta-autunite	Maut
Maoniupingite-(Ce)	Mao-Ce	Mckelveyite-(Y)	Mkv-Y	Metaborite	Mbo
Mapimite	Mpm	Mckinstryite	Mck	Metacalcioranoite	Mcu
Mapiquiroite	Mpq	Mcnearite	Mnr	Metacinnabar	Mcin
Marathonite*	Mth	Medaite*	Med	Metadelrioite	Mdlr
Marcasite*	Mrc	Medenbachite	Mdb	Metahaiweeite	Mhwe
Marchettiite	Mht	Meerschautite	Mee	Metaheinrichite	Mhrc
Marcobaldiite	Mcb	Megacyclite	Mgc	Metahewettite	Mhew
Marécottite	Mco	Megakalsilite	Mks	Metahohmannite	Mhoh
Margaritasite	Mgt	Megawite	Mgw	Metakahlerite	Mkah
Margarite*	Mrg	Meieranite	Mei	Metakirchheimerite	Mki
Margarosanite	Mga	Meierite	Mir	Metaköttigite	Mköt
Marialite*	Mar	Meifuite	Mf	Metaldèveite	Mldv
Marianoite	Mri	Meionite*	Me	Metamunirite	Mmni
Marićite	Mrc	Meisserite	Mss	Metanatroautunite	Mnaut
Maricopaite	Mrp	Meitnerite	Mne	Metanováčekite	Mnvč
Mariinskite	Mii	Meixnerite*	Mxn	Metarauchite	Mrau
Marinaite	Mr	Mejillonesite	Mej	Metarossite	Mrs
Marinellite	Mrn	Melanarsite	Mea	Metasaléeite	Mslé
Markascherite	Mac	Melanocerite-(Ce)	Mcr-Ce	Metaschoderite	Msd r
Markooperite	Mcp	Melanophlogite	Mp	Metaschoepite	Mshp
Markeyite	Mk	Melanostibite	Mlsb	Metasideronatrinite	Mnat
Markhininite	Mkh	Melanotekite*	Mtk	Metastibnite	Msb n
Marklite	Mkl	Melanothallite	Mlth	Metastudtite	Mstu
Marokite	Mro	Melanovanadite	Mvd	Metaswitzerite	Msw
Marrite	Mrr	Melansonite	Mso	Metataboite	Mtm
Marrucciite	Mru	Melanterite*	Mln	Metathénardite	Mthn
Marshite	Msh	Melcherite	Mlh	Metatorbernite	Mtor
Marsturite	Msr	Melilite*	Mll	Metatyuyamunite	Mtyu
Marthozite	Mhz	Meliphanite	Mph	Metaurampbite	Murp
Martinandresite	Mad	Melkovite	Mko	Metauranocircite-I	Murc-I
Martinite	Mrt	Melliniite	Mli	Metauranopilite	Mup
Martyite	Myi	Mellite	Mel	Metauranospinite	Musp
Marumoite	Mrm	Mellizinkalite	Mzk	Metauroxite	Murx
Maruyamaite	Mry	Melonite*	Mlt	Metavandendriesscheite	Mvdd
Mascagnite	Msc	Mélonjosephite	Mjo	Metavanmeersscheite	Mvms
Maslovite	Mlo	Menchettiite	Men	Metavanuralite	Mvnr
Massicot	Msi	Mendeleeveite-(Ce)	Mdl-Ce	Metavariscite	Mvar
Masutomilite*	Msu	Mendeleeveite-(Nd)	Mdl-Nd	Metavauxite	Mvx
Masuyite	Msy	Mendigite	Mdg	Metavivianite	Mviv
Mathesiusite	Mhe	Mendipite	Mdi	Metavoltine	Mvt
Mathewrogersite	Mwg	Mendozavilite-KCa	Mdz-KCa	Metazellerite	Mzel
Mathiasite	Mts	Mendozavilite-NaCu	Mdz-NaCu	Metazeunerite	Mzeu
Matildite	Mtd	Mendozavilite-NaFe	Mdz-NaFe	Meurigite-K	Meu-K
Matioliite	Mti	Mendezite	Mz	Meurigite-Na	Meu-Na
Matlockite	Mtl	Meneghinite	Meg	Meyerhofferite	Mhf
Matsubaraitite	Mbr	Menezesite	Mze	Meymacite	Mym
Mattagamite*	Mtg	Mengeite	Mge	Meyrowitzite	Mey

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Mgriite	Mgi	Momoiite	Mom	Mundrabiliaite	Mb
Mianningite	Min	Monazite-(Ce)*	Mnz-Ce	Munirite	Mni
Miargyrite	May	Monazite-(La)*	Mnz-La	Muonionalustaite	Muo
Miasite	Mia	Monazite-(Nd)*	Mnz-Nd	Murakamiite	Mkm
Mica*	Mca	Monazite-(Sm)*	Mnz-Sm	Murashkoite	Muh
Michalskiite	Mcs	Moncheite*	Mon	Murataite-(Y)	Mrat-Y
Micheelsenite	Msn	Monchetundraite	Mtdr	Murchisite	Mur
Michenerite*	Mch	Monetite	Mnti	Murdochite	Mdh
Michitoshiite-(Cu)	Mhs-Cu	Mongolite	Mgl	Murmanite	Mmn
Microcline	Mcc	Monimolite	Mml	Murunskite	Mu
Microlite	Mic	Monipite	Mnp	Muscovite*	Ms
Microsommite	Msm	Monohydrocalcite	Mhcal	Museumite	Mus
Middendorffite	Mdd	Montanite	Mta	Mushistonite	Mhi
Middlebackite	Mbk	Montbrayite*	Mnb	Muskoxite	Mkx
Mieite-(Y)	Mi-Y	Montdorite*	Mdr	Muthmannite	Mma
Miersite	Mier	Montebrasite	Mbs	Mutinaite	Mut
Miesiite*	Mie	Monteneroite	Mte	Mutnovskite	Mvs
Miguelromeroite	Mig	Monteneveite	Mtv	N	
Miharaite*	Mih	Monteponite	Mtp	Nabalamprophyllite	Nlmp
Mikasaite	Mik	Monteregianite-(Y)	Mreg-Y	Nabaphite	Nbh
Mikhowardite	Mhw	Montesommaite	Mtso	Nabesite	Nbs
Milanriederite	Mlrd	Montetrisaite	Mttr	Nabiasite	Nbi
Milarite*	Mil	Montgomeryite	Mgm	Nabimusaite	Nbm
Millerite*	Mlr	Monticellite*	Mtc	Nabokoite	Nab
Millisite	Mill	Montmorillonite*	Mnt	Nacaphite	Ncp
Millosevichite	Msv	Montroseite	Mto	Nacareniobsite-(Ce)	Nns-Ce
Millsite	Mls	Montroyalite	Mtyl	Nacrite*	Ncr
Milotaitite	Mio	Montroydite	Mtyd	Nadorite*	Nad
Mimetite*	Mim	Mooihoekite	Mho	Nafertisite*	Naf
Minakawaite	Mka	Moolooite	Moo	Nagashimalite	Ngs
Minasgeraisite-(Y)	Mgr-Y	Mooreite	Mre	Nagelschmidite	Nsc
Minasragrite	Mra	Moorhouseite	Mh	Nagyágite*	Ngy
Minceevite-(Y)	Mev-Y	Mopungite	Mop	Nahcolite	Nah
Minehillite*	Mhl	Moraesite	Mae	Nahpoite	Nhp
Minguzzite	Mzz	Moraskoite	Mok	Nakauriite	Nak
Minium	Mnm	Mordenite*	Mor	Nakkaalaaqite	Nka
Minjiangite	Mjg	Moreaite	Moa	Naldrettite	Nld
Minnesotaite*	Mns	Morelandite	Mldt	Nalipoite	Nlp
Minohlite	Mnh	Morenosite	Mren	Nalivkinite*	Nlv
Minrecordite	Mrd	Morimotoite*	Mmt	Namansilite	Nms
Minyulite	Myu	Morinite	Mori	Nambulite	Nbl
Mirabilite	Mrb	Morozeviczite	Mzv	Namibite	Nmb
Mirnyite	Mny	Morrisonite	Mris	Namuwite	Nmw
Misakiite	Msk	Mosandrite-(Ce)	Msd-Ce	Nanlingite	Nan
Misenite	Mse	Moschellite	Msch	Nanpingite*	Npg
Miserite	Mis	Moschellandsbergite	Mlb	Nantokite	Ntk
Mitridatite*	Mit	Mosesite	Mos	Naquite	Naq
Mitrofanovite	Mfv	Moskvinitite-(Y)	Mskv-Y	Narsarsukite	Nar
Mitryaevaite	Myv	Mössbauerite*	Msb	Nashite	Nsh
Mitscherlichite	Mits	Mottanaite-(Ce)	Mot-Ce	Nasinite*	Nas
Mixite	Mix	Mottramite	Mott	Nasledovite	Ndv
Miyahisaite	Miy	Motukoreaite*	Mtu	Nasonite	Nso
Moabite	Mab	Mounanaite	Mun	Nastrophite	Nsp
Moctezumite	Moc	Mountainite	Mtn	Nataliakulikite	Nkk
Modderite	Mod	Mountkeithite*	Mke	Nataliyamalikite	Nml
Moëloite	Moë	Mourite	Mou	Natalyite	Nta
Mogánite*	Mog	Moxuanxueite	Mox	Natanite	Ntn
Mogovidite	Mgo	Moydite-(Y)	Moy-Y	Natisite	Nts
Mohite	Moh	Mozartite	Moz	Natrite	Nat
Möhnite	Möh	Mozgovaite	Mzg	Natroalunite	Nalu
Mohrite	Mhr	Mpororoite	Mpo	Natroaphthitalite	Natt
Moissanite	Moi	Mrázekite	Mrz	Natroboltwoodite	Nbwd
Mojaveite	Moj	Mroseite	Mros	Natrochalcite	Nch
Molinelloite	Mnl	Mückeite	Müc	Natrodufrénite	Ndf
Moluranite	Mlu	Muirite	Mui	Natroglaucocerinite	Ngc
Molybdenite	Mol	Mukhinite	Muk	Natrojarosite	Njrs
Molybdite	Myb	Müllerite	Mül	Natrolemonyite	Nlm
Molybdoformacite	Mfor	Mullite*	Mul	Natrolite*	Ntr
Molybdomenite	Mdm	Mummeite	Mum	Natromarkeyite	Nmk
Molybdophyllite	Mdp	Munakataite	Mkat	Natron	Nt
Molysite	My	Mundite	Mud	Natronambulite	Nnbl

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Natroniobite	Nnb	Niigataite	Nii	Obradovite-NaCu	Obr-NaCu
Natropalermoite	Npl	Nikischerite	Nik	Obradovite-NaNa	Obr-NaNa
Natropharmacoalumite	Npal	Nikmelnikovite	Nmn	O'danielite	Oda
Natropharmacosiderite	Npsd	Niksergievite	Nsg	Odigitriaite	Odi
Natrophilite	Ntp	Nimite*	Nim	Odikhinchaite	Odk
Natrophosphate	Nap	Ningyoite	Nin	Odinite*	Odn
Natrosilite	Ns	Niningerite	Nng	Odintsovite	Odt
Natrosulfatourea	Nsf	Nioboaeschynite-(Ce)	Naes-Ce	Oenite	Oen
Natrotantite	Ntan	Nioboaeschynite-(Y)	Naes-Y	Offretite	Off
Natrotitanite	Ntt	Niobocarbide	Ncb	Oftedalite*	Oft
Natrouranospinite	Nusp	Niobohettetjernite	Nhef	Ogdensburgite	Obu
Natrowalentaite	Nwal	Nioboholtite	Nhlt	Ognite	Ogn
Natroxalate	Nx	Niobokupletskite*	Nbk	Ohmilite	Oh
Natrozippite	Nzip	Niobophyllite*	Nbp	Ojuelaite*	Ojl
Naujakasite	Nj	Niocalite	Nio	Okanoganite-(Y)	Oka-Y
Naumannite*	Nau	Nipalarsite	Nip	Okayamalite	Oky
Navajoite	Nvj	Nisbite	Nis	Okenite	Oke
Navrotskyite	Nvr	Nishanbaevite	Nbv	Okhotskite	Okh
Nazarovite	Naz	Nisnite	Nn	Okieite	Oki
Nchwangingite	Nwg	Nissonite	Nss	Okruschite	Okr
Nealite	Nea	Niter	Nit	Oldhamite*	Old
Nechelyustovite	Nec	Nitratine	Ntt	Olekminskite	Okm
Nefedovite	Nef	Nitrobarite	Nba	Olenite	Ole
Negevite	Neg	Nitrocaltite	Ncal	Olgite	Olg
Neighborite	Nbo	Nitromagnesite	Nmgs	Olivine*	Ol
Nekoite	Nk	Nitscheite	Nih	Olivinite	Oli
Nekrasovite*	Nek	Niveolanite	Nvl	Olkhonskite	Olk
Nelenite*	Nln	Nixonite	Nix	Olmiite	Olm
Neltnerite	Nel	Nizamoffite	Niz	Olmsteadite	Osd
Nenadkevichite	Nkv	Nobleite	Nob	Olsacherite	Ols
Neotocite	Neo	Noelbensonite	Noe	Olskanskyite	Osh
Nepheline*	Nph	Nöggerathite-(Ce)	Nög-Ce	Olympite	Oly
Népouite*	Npo	Nolanite	Nol	Omariniite	Oma
Nepskoeite	Nep	Nollmotzite	Nmz	Omeiite	Ome
Neptunite	Npt	Nolzeite	Nlz	Ominelite	Omi
Neskevaaraite-Fe	Nsv-Fe	Nontronite*	Non	Omongwaite	Omo
Nesquehonite*	Nes	Noonkanbahite	Noo	Omphacite*	Omp
Nestolaite	Ntl	Norbergite*	Nrb	Omsite	Om
Neustädteite	Neu	Nordenskiöldine	Nsk	Ondrušite	Ond
Nevadaite	Nev	Nordgauite	Ndg	Oneillite	One
Nevskite	Nvk	Nordite-(Ce)	Nor-Ce	Onoratoite	Ono
Newberyite	New	Nordite-(La)	Nor-La	Oosterboschite	Oos
Neyite*	Ney	Nordstrandite*	Nsd	Opal*	Opl
Nežilovite	Než	Nordströmite	Nsm	Ophirite	Oph
Niahite	Nhi	Norilskite	Nrs	Oppenheimerite	Ohm
Niasite	Nia	Normandite	Nmd	Orcelite*	Orc
Nickel*	Ni	Norrishite*	Nrr	Ordoñezite	Ord
Nickelaustinite	Naus	Norsethite*	Nst	Örebroite	Öbr
Nickelbischofite	Nbsf	Northstarite	Nsr	Oregonite	Ore
Nickelblödite	Nblö	Northupite	Nup	Oreillyite	Ory
Nickelbousingaultite	Nbsg	Nosean*	Nsn	Organovaite-Mn	Org-Mn
Nickelhexahydrate	Nhhy	Nováčekite-I	Nvč-I	Organovaite-Zn	Org-Zn
Nickeline*	Nc	Nováčekite-II	Nvč-II	Orickite	Ori
Nickellotharmeyerite	Nlmy	Novákite	Nvá	Orientite	Orn
Nickelphosphide*	Nic	Novgorodovaite	Nov	Orishchinite	Orh
Nickelpicromerite	Npmr	Novodneprite	Nnp	Orlandiite	Ola
Nickelschneebergite	Nsnb	Novograblenovite	Ngb	Orlovite	Olv
Nickelskutterudite	Nskt	Nowackiite	Now	Orlymanite*	Orl
Nickeltalmessite	Ntlm	Nsutite*	Nsu	Orpiment*	Orp
Nickeltsumcorite	Ntsm	Nuffieldite	Nuf	Orschallite	Ors
Nickeltyrrellite	Nty	Nukundamite	Nuk	Orthoamphibole*	Oamp
Nickelzippite	Nizip	Nullaginite	Nlg	Orthobrannerite	Obnr
Nickenichite	Nkn	Numanoite	Num	Orthoclase*	Or
Nickolayite	Nkl	Nuragheite	Nur	Orthocuproplatinum	Ocpt
Nicksobolevite	Nsb	Nuwaite	Nuw	Orthojoaquinite-(Ce)	Ojq-Ce
Niedermayrite	Ndm	Nybøite*	Nyb	Orthojoaquinite-(La)	Ojq-La
Nielsbohrite	Nbr	Nyerereite	Nye	Orthominasragrite	Omrq
Nielseniite	Nie	Nyholmite	Nyh	Orthopinakiolite	Opki
Nierite	Nr	O		Orthopyroxene*	Opx
Nifontovite	Nif	Oberthürte*	Obt	Orthoserpierite	Ospe
Niggliite	Nig	Obradovite-KCu	Obr-KCu	Orthowalpurite	Owal

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Osakaite	Ok	Palladothallite	Pdt	Paravinogradovite	Pvgd
Osarizawaite	Orz	Palladseite	Pds	Parawulffite	Pwlf
Osarsite	Osa	Palmierite	Pmi	Pargasite*	Prg
Osbornite	Obn	Palygorskite*	Plg	Parisite-(Ce)*	Pst-Ce
Oscarkeppffite	Okp	Pampaloite	Ppl	Parisite-(La)*	Pst-La
Oskarssonite	Osk	Panasqueiraite	Psq	Parkerite*	Prk
Osmium*	Os	Pandoraite-Ba	Pdo-Ba	Parkinsonite	Pkn
Osumilite*	Osm	Pandoraite-Ca	Pdo-Ca	Parnauite	Pna
Osumilite-(Mg)*	Osm-Mg	Panethite	Pne	Parsettenite*	Psn
Oswaldpeetersite	Osw	Panguite	Pgu	Parsonsite	Pso
Otavite	Ota	Panichiite	Pnc	Parthéite	Pth
Otjissimeite	Otj	Panskyite	Pky	Parwanite	Prw
Ottemannite	Ott	Pansnerite	Pns	Parwelite	Pwe
Ottensite	Ots	Panunzite	Pnz	Pašavaite	Pšv
Ottohahnite	Ohn	Paolovite*	Plv	Pascoite	Pas
Ottoite	Oto	Papagoite	Pap	Paseroite	Psr
Ottrélite*	Otr	Paquite	Paq	Patrónite	Pat
Otwayite	Otw	Para-alumohydrocalcite	Pahcal	Pattersonite	Patt
Oulankaite	Oul	Paraberzeliite	Pbzl	Patynite	Pty
Ourayite*	Our	Parabrandtite	Pbdt	Paufferite	Pfl
Oursinite	Osn	Parabutlerite	Pbtl	Pauladamsite	Pad
Ovamboite	Ova	Paracelsian	Pcls	Paulingite-Ca	Pau-Ca
Overite	Ove	Paracoquimbite	Pcoq	Paulingite-K	Pau-K
Owensite	Owe	Paracostibite	Pcsb	Paulkellerite	PKl
Owyheeite	Owy	Paradamite	Prd	Paulkerrite	Pke
Oxammite	Oxa	Paradocrasite	Pdc	Paulmooreite	Pmo
Oxo-magnésio-hastingsite	Omhst	Parádsasvárite	Psv	Pauloabibite	Pla
Oxo-mangani-leakeite	Omlk	Paraershovite	Psh	Paulscherrerite	Psc
Oxybismutomicrolite	Obmic	Parafiniukite	Pfn	Pautovite	Ptv
Oxycalcimicrolite	Ocmic	Parafrosoletite	Pfsl	Pavlovskiyite	Pvs
Oxycalciopyrochlore	Ocpcl	Parageorgbokiite	Pgbk	Pavonite*	Pav
Oxycalcioroméite	Ocr	Paragonite*	Pg	Paxite	Pax
Oxy-chromium-dravite	Ocdrv	Paraguanajuatite	Pgj	Pearceite*	Pea
Oxy-dravite	Odrv	Parahibbingite	Phib	Peatite-(Y)	Pti-Y
Oxy-foitite	Ofoi	Parahopeite	Phop	Pecoraite*	Pco
Oxykinoshitalite*	Okns	Parakeldyshite	Pkel	Pectolite*	Pct
Oxynatromicrolite	Onmic	Parakuzmenkoite-Fe	Pkz-Fe	Peisleyite	Pei
Oxyphlogopite	Ophl	Paralabuntsovite-Mg	Plab-Mg	Pekoite*	Pek
Oxyplumboroméite	Opr	Paralaurionite	Plri	Pekovite	Pko
Oxy-schorl	Osrl	Paralstonite	Pasn	Péligotite	Pél
Oxystannomicrolite	Omic	Paramelaconite	Pml	Pellouxite	Plx
Oxystibimicrolite	Osmic	Paramendozavilite	Pmdz	Pellyite	Ply
Oxy-vanadium-dravite	Ovdrv	Paramontroseite	Pmto	Penberthycroftite	Pbc
Oxyvanite	Oxy	Paranatisite	Pnts	Penfieldite	Pfd
Oyelite	Oye	Paranatroilite	Pntr	Penikisite	Pks
Oyonite	Oyo	Paraniite-(Y)	Prn-Y	Penkviksite	Pvl
Ozerovaité	Oze	Paraotwayite	Potw	Pennantite*	Pnn
P		Parapierrotite	Ppie	Penobscquitte	Pnb
Pääkkönenite	Pä	Pararaisaite	Prsa	Penroseite	Pen
Paarite	Paa	Pararammelsbergite	Prmb	Pentagonite	Ptg
Pabstite	Pab	Pararealgar	Prlg	Pentahydrate	Phy
Paceite	Pac	Pararobertsite	Prb	Pentahydroborite	Phb
Pachnolite	Phn	Pararsenolamprite	Pasl	Pentlandite*	Pn
Packratite	Pkt	Parascandolaite	Psd	Penzhinite	Pzh
Paddlewheelite	Pdw	Paraschacherite	Pshn	Peprossiite-(Ce)	Pep-Ce
Padérite	Pdē	Paraschoepite	Pshp	Perbøite-(Ce)	Pbø-Ce
Padmaite	Pdm	Parascholzite	Pslz	Perbøite-(La)	Pbø-La
Paganoite	Pgn	Parascorodite	Pscd	Percleveite-(Ce)	Pcv-Ce
Pahasapaite	Pah	Parasibirskite	Psib	Percleveite-(La)	Pcv-La
Painite	Pai	Parasterryite	Psty	Peretaite	Pta
Pakhomovskiyite	Phv	Parasymplexite	Psym	Perettiite-(Y)	Ptt-Y
Palarstanide	Pls	Paratacamite	Pata	Perhamite	Phm
Palenzonaite	Plz	Paratacamite-(Mg)	Pata-Mg	Periclase*	Per
Palermoite	Ple	Paratacamite-(Ni)	Pata-Ni	Perite	Pe
Palladinite	Pdn	Paratellurite	Ptlr	Perthialite	Pll
Palladium*	Pd	Paratimroseite	Ptim	Perloffite	Plf
Palladoarsenide	Pda	Paratooite-(La)	Pto-La	Permingeatite	Pmg
Palladobismutharsenide	Pba	Paratsepinite-Ba	Ptse-Ba	Perovskite*	Prv
Palladodymite	Pdd	Paratsepinite-Na	Ptse-Na	Perraultite*	Prt
Palladogermanide*	Pdg	Paraumbite	Pumb	Perrierite-(Ce)*	Prr-Ce
Palladosilicide	Psl	Paravauxite	Pvx	Perrierite-(La)*	Prr-La

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Perroudite	Pro	Piemontite*	Pmt	Polyolithionite*	Pln
Perryite	Pry	Piemontite-(Pb)*	Pmt-Pb	Polyphite	Ppt
Pertlikite*	Plk	Piemontite-(Sr)*	Pmt-Sr	Ponomarevite	Pon
Pertsevite-(F)	Psv-F	Piergorite-(Ce)	Pgo-Ce	Popovite	Ppv
Pertsevite-(OH)	Psv-OH	Pierrotite	Pie	Poppiite	Pop
Petalite*	Ptl	Pigeonite*	Pgt	Popugaevaite	Pgv
Petarasite	Pra	Pigotite	Pig	Portlandite	Por
Petedunnite	Pdu	Pilawite-(Y)	Plw-Y	Pošepnýite	Pšý
Peterandresenite	Pan	Pillaite	Pil	Posnjakite	Pnk
Peterbaylissite	Pby	Pilsenite	Pse	Postite	Pos
Petersenite-(Ce)	Pet-Ce	Pinakiolite	Pki	Potarite	Ptr
Petersite-(Ce)	Pts-Ce	Pinalite	Pnl	Potassic-arfvedsonite	Parf
Petersite-(La)	Pts-La	Pinchite	Pin	Potassiccarpholite	Pcar
Petersite-(Y)	Pts-Y	Pingguite	Png	Potassic-chloro-hastingsite	Pchst
Petewilliamsite	Pwi	Pinnoite	Pno	Potassic-chloro-pargasite	Pcprg
Petitjeanite	Pjn	Pintadoite	Ptd	Potassic-ferri-leakeite	Pflk
Petříčekite	Pčk	Piretite	Pir	Potassic-ferro-ferri-sadanagaite	Pffsdg
Petrovicite	Pvc	Pirquitasite*	Pi	Potassic-ferro-ferri-taramite	Pfftrm
Petrovite	Pv	Pirssonite	Pss	Potassic-ferro-pargasite	Pfprg
Petrovskaita	Pvk	Pisekite-(Y)	Pis-Y	Potassic-ferro-sadanagaite	Pfsdg
Petrukite*	Ptk	Pitiglianoite	Pgl	Potassic-ferro-taramite	Pftrm
Petscheckite	Psk	Pitticite	Ptc	Potassic-fluoro-hastingsite	Pfhst
Petterdite	Pte	Pittongite	Pit	Potassic-fluoro-pargasite	Pflprg
Petzite*	Ptz	Piypite	Piy	Potassic-fluoro-richterite	Pfrct
Pezzottaite	Pez	Pizgrischite	Piz	Potassic-hastingsite	Phst
Pharmacoalumite	Pal	Plagioclase*	Pl	Potassic-jeanlouisite	Pjl
Pharmacolite	Pmc	Plagionite	Pgi	Potassic-magnesian-arfvedsonite	Pmarf
Pharmacosiderite	Pmsd	Plancheite	Pch	Potassic-magnesian-fluoro-arfvedsonite	Pmfarf
Pharmazincite	Pznc	Planerite	Pnr	Potassic-magnesian-hastingsite	Pmhst
Phaunouxite	Pnx	Plášilite	Pšl	Potassic-mangani-leakeite	Pmlk
Phenakite*	Phk	Platarsite*	Plt	Potassic-pargasite	Pprg
Philipsbornite	Pbn	Platinum*	Pt	Potassic-richterite	Prct
Philipsburgite	Pbu	Plattnerite	Ptn	Potassic-sadanagaite	Psdg
Phillipsite-Ca*	Php-Ca	Plavnoite	Pvn	Pottsite	Pot
Phillipsite-K*	Php-K	Playfairite	Pyf	Poubaite	Pub
Phillipsite-Na*	Php-Na	Plimerite	Pme	Poudretteite*	Pou
Philolithite	Phi	Pliniusite	Pli	Poughite	Pgh
Philoxenite	Pxn	Plombièreite*	Plm	Povondraite*	Pov
Philrothite	Phr	Plumboagardite	Pagr	Powellite*	Pwl
Phlogopite*	Phl	Plumboferrite	Pfr	Poyarkovite	Poy
Phoenicochroite	Phc	Plumbogummite	Pbg	Pracharite	Pcř
Phosgenite	Pho	Plumbojarosite	Pjrs	Pradetite	Pde
Phosinaite-(Ce)	Psi-Ce	Plumbonacrite	Pncr	Prehnite*	Prh
Phosphammite	Pam	Plumbopalladinite	Ppdl	Preisingerite	Psg
Phosphocyclite-(Fe)	Pc-Fe	Plumboperloffite	Pplf	Preiswerkite*	Pwk
Phosphocyclite-(Ni)	Pc-Ni	Plumbopharmacosiderite	Ppsd	Preobrazhenskite	Pbz
Phosphoellenbergerite	Pell	Plumbophyllite	Pbp	Pretulite	Ptu
Phosphoferrite	Phf	Plumboselite	Pbs	Prewittite	Pwt
Phosphofibrite	Pfb	Plumbotellurite	Pbtlr	Řibramite	Pbm
Phosphogartrellite	Pgtl	Plumbotsumite	Ptm	Priceite	Pce
Phosphohedyphane	Phdy	Plumosite	Plu	Priderite*	Pdr
Phosphoinnelite	Pinn	Podlesnoite	Pod	Princivalleite	Pva
Phosphophyllite	Pp	Poirierite	Poi	Pringleite	Pri
Phosphorösslerite	Prö	Poitevinite	Pvi	Priscillagrewite-(Y)	Pgr-Y
Phosphosiderite	Phsd	Pokhodyashinite	Pok	Prismatine*	Prm
Phosphovanadylite-Ba	Pvd-Ba	Pokrovskite	Pkr	Probertite	Pbr
Phosphovanadylite-Ca	Pvd-Ca	Polarite	Plr	Proshchenkoite-(Y)	Pck-Y
Phosphowalpurkite	Pwal	Poldervaartite	Pdv	Prosopite	Psp
Phosphuranylite	Puy	Polekhovskite	Pkh	Prosperite	Ppe
Phoxite	Phx	Polezhaevaite-(Ce)	Pzv-Ce	Protasite	Ps
Phuralumite	Pha	Polhemusite	Phe	Proto-anthophyllite	Path
Phurcalite	Phu	Polkanovite	Pkv	Protocaseyite	Pcy
Phylloretine	Pre	Polkovicite	Pk	Protochabournéite	Pchb
Phyllotungstite	Ptgs	Polloneite	Plo	Protoenstatite	Pten
Picaite	Pic	Pollucite*	Pol	Proto-ferro-anthophyllite	Pfath
Piccolite	Pcc	Polyakovite-(Ce)	Pak-Ce	Proto-ferro-suenoite	Pfsue
Pickeringite	Pkg	Polyarsite	Par	Proudite	Pdi
Picotpaulite	Pcp	Polybasite*	Plb	Proustite*	Prs
Picromerite	Pmr	Polycrase-(Y)*	Plc-Y	Proxidecagonite	Pdec
Picropharmacolite	Ppm	Polydymite*	Pld	Przhevskite	Prz
Pieczkaite	Pzk	Polyhalite	Plhl	Pseudoboleite	Pbol

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Pseudobrookite	Pbrk	Raberite	Rbr	Retzian-(Nd)	Rtz-Nd
Pseudocotunnite	Pcot	Radekškodaite-(Ce)	Ršk-Ce	Revdite	Rev
Pseudograndreefite	Pgrf	Radekškodaite	Ršk	Reyerite	Rey
Pseudojohannite	Pjh	Radhakrishnaite	Rhk	Reynoldsite	Ryn
Pseudolaueite	Plae	Radovanite	Rdv	Rhabdobarite-(Mo)	Rbo-Mo
Pseudolyonsite	Plyo	Radtkeite*	Rdk	Rhabdobarite-(V)	Rbo-V
Pseudomalachite	Pmlc	Raguinite	Rgu	Rhabdobarite-(W)	Rbo-W
Pseudomarkeyite	Pmk	Raisaite	Rsa	Rhabdophane-(Ce)	Rha-Ce
Pseudomeisserite-(NH₄)	Pmss-NH ₄	Raite*	Rai	Rhabdophane-(La)	Rha-La
Pseudorutile	Pdrt	Rajite	Raj	Rhabdophane-(Nd)	Rha-Nd
Pseudosinhalite	Pshl	Rakovanite	Rkv	Rhabdophane-(Y)	Rha-Y
Pseudowollastonite	Pwo	Ralphcannonite	Rcn	Rheniite	Rhn
Pucherite	Puc	Ramaccioniite	Rmc	Rhodarsenide	Rda
Pumpellyite-(Al)*	Pmp-Al	Ramanite-(Cs)	Ram-Cs	Rhodesite	Rod
Pumpellyite-(Fe²⁺)*	Pmp-Fe ²⁺	Ramanite-(Rb)	Ram-Rb	Rhodium*	Rh
Pumpellyite-(Fe³⁺)*	Pmp-Fe ³⁺	Ramazzoite	Rmz	Rhodizite*	Rdz
Pumpellyite-(Mg)*	Pmp-Mg	Rambergite	Rbg	Rhodochrosite*	Rds
Pumpellyite-(Mn²⁺)*	Pmp-Mn ²⁺	Ramdohrite	Rdh	Rhodonite*	Rdn
Puninite	Pun	Rameauite	Rme	Rhodostannite*	Rhs
Punkaruavite	Pka	Ramikite-(Y)	Rmi-Y	Rhodplumsite	Rhp
Purpurite	Pur	Rammelsbergite*	Rmb	Rhomboclase	Rbc
Pushcharovskite	Pus	Ramosite	Rms	Rhönite	Rhö
Putnisite	Pni	Ramsbeckite	Rbe	Ribbeite	Rib
Putoranite*	Put	Ramsdellite*	Rmd	Richardsite	Ric
Puttapaite	Ptp	Ranciéite*	Rnc	Richardsollyite	Rsy
Putzite	Pzi	Rankachite	Rka	Richellite	Rhe
Pyatenkoite-(Y)	Pyt-Y	Rankamaite	Rkm	Richelsdorffite	Rdf
Pyracmonite	Pyr	Rankinite*	Rnk	Richetite	Rht
Pyradoketosite	Pdk	Ransomite	Rns	Richterite*	Rct
Pyraryrite*	Pyg	Ranunculite	Rnu	Rickardite	Rkd
Pyrite*	Py	Rapidcreekite	Rck	Rickturnerite	Rtn
Pyroaurite*	Pya	Rappoldite	Rap	Riebeckite*	Rbk
Pyrobelonite	Pbl	Raslakite	Rsk	Riesite	Rie
Pyrochroite*	Pyc	Raspite	Rsp	Rietveldite	Rvd
Pyrochlore*	Pcl	Rastsvetaevite	Rvt	Rilandite	Ril
Pyrolusite*	Pyl	Rasvumite*	Rsv	Rimkorolgit	Rolg
Pyromorphite	Pym	Rathite*	Rat	Ringwoodite*	Rwd
Pyrope*	Prp	Rathite-IV	Rat-IV	Rinkite-(Ce)	Rin-Ce
Pyrophanite*	Pph	Rauchite	Rau	Rinkite-(Y)	Rin-Y
Pyrophyllite*	Prl	Rauenthalite	Rth	Rinmanite	Rnm
Pyrosmalite-(Fe)*	Pys-Fe	Rauvite	Ruv	Rinneite	Rne
Pyrosmalite-(Mn)*	Pys-Mn	Ravatite	Rav	Riomarinaite	Rmr
Pyrostilpnite	Psti	Raygranite	Rgr	Riosecoite	Rse
Pyroxene*	Px	Rayite	Ray	Riotintoite	Rio
Pyroxferroite*	Pxf	Realgar*	Rlg	Rippite	Rip
Pyroxmangite*	Pxm	Reaphookhillite	Rea	Rittmannite	Rit
Pyrrhotite*	Pyh	Rebule	Reb	Rivadavite	Riv
Q		Rectorite	Rec	Riversideite	Rsd
Qandilite*	Qnd	Redcanyonite	Rcy	Roaldite	Roa
Qaqarssukite-(Ce)	Qq-Ce	Reddingite*	Rdd	Robertsite	Rbt
Qatranait	Qat	Redgillite	Rgl	Robinsonite*	Rob
Qilianshanite	Qil	Redingtonite	Rdt	Rockbridgeite	Rkb
Qingheite	Qin	Redledgeite	Red	Rodalquilarite	Raq
Qingheite-(Fe²⁺)	Qin-Fe ²⁺	Redondite	Rdo	Rodolicoite	Rdl
Qingsongite	Qsg	Reederite-(Y)	Rde-Y	Roebingite	Roe
Qitianlingite	Qit	Reedmergnerite	Rm	Roedderite*	Rdr
Quadratite	Qd	Reevesite	Rvs	Rogermitchellite	Rmt
Quadridavynite	Qdv	Refikite	Ref	Roggianite	Rog
Quadruphite	Qua	Reichenbachite	Rbh	Rohaite	Roh
Quartz*	Qz	Reidite	Rei	Rokühnite	Rok
Queitite	Que	Reinerite	Rnr	Rollandite	Rol
Quenselite	Qns	Reinhardbraunsite	Rbn	Romanèchite*	Rmn
Quenstedtite	Qst	Rémondite-(Ce)	Rém-Ce	Romanorlovite	Ror
Quetzalcoatlite	Qzl	Rémondite-(La)	Rém-La	Romarchite	Rom
Quijarroite	Qui	Renardite	Rnd	Römerite	Röm
Quintinite	Qtn	Rengeite	Rge	Rondorfite	Ron
Qusongite	Qus	Renierite*	Ren	Rongibbsite	Rgb
R		Reppiaite	Rep	Ronneburgite	Rbu
Raadeite	Raa	Retgersite	Rtg	Röntgenite-(Ce)	Rng-Ce
Rabbittite	Rab	Retzian-(Ce)	Rtz-Ce	Rooseveltite	Roo
Rabejacite	Rbj	Retzian-(La)	Rtz-La	Roquesite*	Ro

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Rorisite	Rrs	Saddlebackite	Sdd	Schallerite*	Slr
Rosasite	Rss	Safflorite*	Saf	Schapbachite	Spb
Roscherite*	Rsc	Sahamalite-(Ce)	Shm-Ce	Schaurteite	Sht
Roscoelite*	Rcl	Sahlinite	Sah	Scheelite*	Sch
Roselite	Rsl	Sailaufite	Slf	Schertelite	She
Roselite-β	Rsl-β	Sainfeldite	Sai	Scheuchzerite	Shz
Rosemaryite	Rmy	Sakhaite	Skh	Schiavinatoite	Shv
Rosenbergite	Ros	Sakuraiite	Sak	Schieffelinite	Sfl
Rosenbuschite	Rbs	Salammoniac	Sam	Schindlerite	Shi
Rosenhahnite	Rhh	Saléite	Slé	Schizolite	Szl
Roshchinite	Rch	Salesite	Sls	Schlegelite	Scg
Rosiaite	Rsi	Saliotite*	Sal	Schlemaite	Slm
Rosickyite	Rký	Saltonseaitite	Sts	Schlossmacherite	Ssm
Rosièresite	Rsr	Salzburgite	Szb	Schlüterite-(Y)	Slü-Y
Rossiantonite	Ran	Samaniite	Smn	Schmidite	Smd
Rossite	Rs	Samarskite-(Y)	Smk-Y	Schmiederite	Scm
Rösslerite	Rö	Samarskite-(Yb)	Smk-Yb	Schmitterite	Sci
Rossmannite*	Rsm	Samfowlerite	Sfw	Schneeburgite	Snb
Rossovskyite	Rvy	Sampleite	Smp	Schneiderhöhnite	Snh
Rostite	Rst	Samsonite	Ssn	Schoderite	Sde
Roterbärite	Rbä	Samuelsonite	Sms	Schoenfliesite	Sfs
Rouaite	Rou	Sanbornite	Sabn	Schoepite	Sho
Roubaultite	Rbl	Sanderite	Sdr	Schöllhornite	Slh
Roumaite	Rma	Saneroite	Snr	Scholzite	Slz
Rouseite	Rus	Sangenaroite	Sgar	Schoonerite	Soo
Routhierite	Rtr	Sanguite	Sgu	Schorl*	Srl
Rouvilleite	Rvl	Sanidine*	Sa	Schorlomite	Slo
Rouxelite	Rxl	Sanjuanite	Sjn	Schreibersite*	Scb
Roweite	Rwe	Sanmartinite	Sma	Schreyerite	Sry
Rowlandite-(Y)	Row-Y	Sanrománite	Srm	Schröckingerite	Srö
Rowleyite	Rwl	Santabarbaraite*	Sbb	Schubnelite	Shb
Roxbyite	Rox	Santaclaraite	Scl	Schuetite	Sh
Roymlillerite	Roy	Santaféite	Sfe	Schulingite-(Nd)	Shg-Nd
Rozenite	Rzn	Santanaite	San	Schulenbergite	Slb
Rozhdestvenskayaite-(Zn)	Roz-Zn	Santarosaite	Srs	Schüllerite	Shü
Ruffite	Ruf	Santite	Snt	Schulthenite	Slt
Ruarsite*	Rua	Saponite*	Sap	Schumacherite	Shh
Rubicline	Rub	Sapphirine*	Spr	Schwartzembergite	Swb
Rubinite	Rbi	Sarabauite	Sbu	Schwertmannite*	Swm
Rucklidgeite*	Ruk	Saranchinaite	Src	Sclarite	Sl
Rudabányaite	Rdb	Saranovskite	Svs	Scolecite	Slc
Rudashevskyite	Rud	Sarcosite	Sco	Scordarite	Sda
Rudenkoite	Rd	Sarcopsidite*	Sar	Scorodite*	Scd
Rüdlingerite	Rdg	Sardignaite	Sdi	Scorticoite	Srt
Ruifrancoite	Rui	Sarkinite	Srk	Scorzalite*	Scz
Ruitenbergitte	Rtb	Sarmientite	Smi	Scotlandite	Sct
Ruizite	Rz	Sarrabusite	Sbs	Scottyite	Sty
Rumoite	Rmo	Sartorite*	Sat	Scrutinyite	Sny
Rumseyite	Rum	Saryarkite-(Y)	Syk-Y	Seaborgite	Sea
Rusakovite	Rko	Sasaite	Sas	Seamanite	Sem
Rusinovite	Rnv	Sassolite	Sso	Searlesite	Sle
Russellite	Rll	Satimolite	Sati	Sederholmite	Sdh
Russoite	Rso	Satpaevite	Spv	Sedovite	Sdv
Rustenburgite*	Rsb	Satterlyite	Sly	Seeligerite	Sli
Rustumite	Rtm	Sauconite*	Sau	Seelite	See
Ruthenarsenite	Ras	Sayrite	Syr	Segelerite	Sgl
Rutheniridosmine	Rir	Sazhinite-(Ce)	Szi-Ce	Segerstromite	Ssr
Ruthenium	Ru	Sazhinite-(La)	Szi-La	Segnitite	Sgt
Rutherfordine	Rfd	Sazykinaite-(Y)	Szn-Y	Seidite-(Ce)	Sei-Ce
Rutile*	Rt	Sbacchite	Scc	Seidozerite*	Sdz
Rynersonite	Rys	Sborgite	Srg	Seifertite	Sft
S		Scacchite	Sca	Seinäjokite	Sjk
Saamite	Saa	Scainite	Scn	Sejkoraite-(Y)	Sej-Y
Sabatierite*	Sab	Scandiobabingtonite	Sbab	Sekaninaite*	Skn
Sabelliite	Sbl	Scapolite*	Scp	Selenium*	Se
Sabieite	Sbi	Scarbrite	Scr	Selenojalpaite	Sjal
Sabinaite	Sba	Scawite	Scw	Selenolaurite	Slrt
Sabugalite	Sbg	Schachnerite	Shn	Selenopolybasite	Spb
Saccoite	Sac	Schafarzikite	Sfz	Selenostephanite	Ssph
Sacrofanite	Scf	Schäferite	Sfr	Seligmannite	Seli
Sadanagaite*	Sdg	Schairerite	Shr	Selivanovaite	Svn

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Sellaite	Sel	Silhydrite	Shy	Sphaerobismoite	Sbm
Selwynite	Swy	Silicocarnotite	Scnt	Sphalerite*	Sp
Semenovite-(Ce)	Smv-Ce	Silicon*	Si	Spheniscidite	Snc
Semseyite	Ssy	Silinaite	Sln	Spherochalcite	Scbt
Senaite	Sna	Sillénite	Sén	Spinel*	Spl
Senarmontite*	Sen	Sillimanite*	Sil	Spionkopite*	Spi
Senegalite	Sng	Silver (<i>argentum</i>)*	Ag	Spiridonovite	Srv
Sengierite	Sgi	Silvialite*	Slv	Spiroffite	Spf
Senkevichite	Sev	Simferite	Smf	Spodumene*	Spd
Sepiolite*	Sep	Simmonsite	Sim	Spriggite	Sgg
Serandite	Srd	Simonellite	Sne	Springcreekite	Sck
Serendibite	Ser	Simonite	Smo	Spryite	Syi
Sergeevite	Sge	Simonkolleite	Skl	Spurrite*	Spu
Sergevanite	Sgv	Simplotite	Spo	Srebrodolskite	Sre
Serpentine*	Srp	Simpsonite	Spn	Šrenite	Šrn
Serpierite	Spe	Sincosite	Scs	Šrilankite	Sri
Serrabrancaite	Sra	Sinhalite	Sihl	Stalderite	Sld
Sewardite	Sew	Sinjarite	Snj	Staněkite	Stk
Shabaite-(Nd)	Sbt-Nd	Sinkankasite	Ska	Stanfieldite	Stf
Shabynite	Sby	Sinnerite	Sin	Stangersite	Sgs
Shadlunite	Slu	Sinoite	Sno	Stanleyite	Stl
Shafraanovskite*	Sfn	Sitinakite	Sit	Stannite*	Stn
Shakhdaraita-(Y)	Skd-Y	Siudaite	Siu	Stannoidite*	Sta
Shagamite	Sgm	Siwaqaite	Siw	Stannopalladinite	Spdn
Shakhovite	Sk	Skaergaardite	Skg	Starkeyite	Ske
Shandite	Snd	Skinnerite	Ski	Staročeskéite	Sčk
Shannonite	Snn	Skippenite*	Skp	Starovaite	Sro
Sharpite	Shp	Sklodovskite	Sds	Staurolite*	St
Sharyginite	Syg	Skorpionite	Skr	Stavelotite-(La)	Svt-La
Shattuckite	Sha	Skutterudite*	Skt	Steacyite	Scy
Shcherbakovite	Sbk	Slavikite	Svi	Steedeite	Sed
Shcherbinaite	Shc	Slavkovite	Sav	Steenstrupine-(Ce)	Ssp-Ce
Shchurovskiyite	Svk	Slawsonite	Sws	Stefanweissite	Swi
Sheldrickite	Sdk	Šlikite	Šlk	Steigerite	Sgr
Shenzhuangite	Szh	Sluzhenikinite	Szhi	Steinhardtite	Shd
Sherwoodite	Swd	Smamite	Smm	Steinmetzite	Snm
Shibkovite	Sko	Smectite*	Sme	Steklite	Sek
Shigaite	Sga	Smirnite	Smr	Stellerite	Ste
Shilovite	Shil	Smirnovskite	Snv	Stenhučgarite	Shu
Shimazakiite	Smz	Smithite	Sth	Stenonite	Sten
Shinkolobweite	Skw	Smithsonite	Smt	Stepanovite	Stpn
Shirokshinite*	Shk	Smolyaninovite	Sya	Stephanite*	Sph
Shirozulite	Szu	Smrkovecrite	Skc	Štěpíte	Ště
Shkatulkalite	Skk	Smythite	Syt	Stercorite	Stc
Shlykovite	Skv	Sobolevite	Sob	Stergiouite	Sgo
Shomiokite-(Y)	Shom-Y	Sobolevskite	Sov	Sterlinghillite	Slg
Shortite	Sot	Sodalite*	Sdl	Sternbergite	Srn
Shosanbetsuite	Ssb	Soddyite	Sod	Steropesite	Strp
Shuangfengite	Sfg	Sofiite	Sof	Sterryite	Srr
Shubnikovite	Snk	Sogdianite*	Sog	Stetefeldite	Sf
Shuiskite-(Cr)	Sui-Cr	Söhngéite	Söh	Stetindite-(Ce)	Std-Ce
Shuiskite-(Mg)	Sui-Mg	Sokolovaite	Sok	Stevensite*	Stv
Shulamitite	Sla	Solongoite	Sol	Steverustite	Svr
Shumwayite	Smw	Somersetite	Sse	Stewartite	Stw
Shuvalovite	Svv	Sonolite	Snl	Stibarsen	Sbr
Sibirskite	Sib	Sonoraite	Son	Stibiconite	Sbc
Sicherite	Sic	Sopcheite*	Sop	Stibioclaudite	Scl
Sicklerite	Sik	Sorbyite	Srb	Stibiocolumbite	Sclb
Siderazot	Saz	Sørensenite	Sør	Stibiocolumbite	Sclu
Siderite*	Sd	Sorosite	Sor	Stibiopalladinite	Stpdn
Sideronatrite	Snat	Sosedkoite	Sos	Stibiotantalite	Sttl
Siderophyllite*	Sid	Součekite	Sče	Stibivanite	Stbv
Siderotil	Sdt	Souzalite*	Sou	Stibnite*	Sbn
Sidorenkite	Sdo	Spadaite	Spa	Stichtite*	Stt
Sidpietersite	Sdp	Spaltiite	Spti	Stilbite-Ca*	Stb-Ca
Sidwillite	Sdw	Spangolite	Spg	Stilbite-Na*	Stb-Na
Siegenite	Seg	Spencerite	Scrt	Stilleite*	Sll
Sieleckiite	Sie	Sperryite*	Spy	Stillwaterite	Slw
Sigloite	Sig	Spertiniite	Sni	Stillwellite-(Ce)	Swl-Ce
Siidraite	Sii	Spessartine*	Sps	Stilpnomelane*	Stp
Silesiite	Ssa	Sphaerobrandite	Sbtd	Stishovite*	Sti

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Stistaite	Sst	Sveinbergeite	Sve	Tarapacáite	Tpc
Stöfflerite	Sff	Sveite	Sv	Tarbagataite*	Tbg
Stoiberite	Sbe	Švenekite	Švn	Tarbuttite	Tbt
Stokesite	Sks	Sverigeite	Svg	Tarkianite	Trk
Stolperite	Slp	Svetlanaite	Svl	Taseqite	Tsq
Stolzite	Sz	Svornostite	Svo	Tashelgite	Thg
Stoppaniite	Spp	Svyatoslavite	Svy	Tassieite	Tas
Stottite	Sto	Svyazhinite	Svz	Tatarinovite	Tat
Stracherite	Stra	Swaknoite	Swk	Tatarskite	Tts
Straczekite	Szk	Swamboite-(Nd)	Swa-Nd	Tatyanaitite	Tty
Strakhovite	Skhv	Swartzite	Swz	Tausonite	Tau
Stranskiite	Ssk	Swedenborgite	Swe	Tavagnascoite	Tvg
Strashimirite	Ssh	Sweetite	Sw	Tavorite*	Tav
Strätlingite	Srä	Swinefordite*	Sfd	Tazheranite	Taz
Straßmannite	Sßm	Switzerite	Swt	Tazieffite	Tzf
Strelkinitite	Slk	Sylvanite	Syv	Tazzoliite	Tzo
Strengite*	Stg	Sylvite*	Syl	Teallite*	Tel
Stringhamite	Sgh	Symesite	Sy	Tedhadleyite	Ted
Stromeyerite*	Smy	Symplesite	Sym	Teepelite	Tee
Stronadelphite	Sad	Synadelphite	Syd	Tegengrenite	Teg
Stronalsite*	Sns	Synchysite-(Ce)*	Syn-Ce	Teineite*	Tei
Strontianite*	Str	Synchysite-(Nd)*	Syn-Nd	Telargpalite	Tlp
Strontioborite	Srbo	Synchysite-(Y)*	Syn-Y	Tellurantimony	Tea
Strontiochevkinite	Scvk	Syngenite	Sgn	Tellurite	Tlr
Strontiodresserite	Sdrs	Szaibélyite	Sza	Tellurium*	Te
Strontiofluorite	Sflr	Szenicsite	Sze	Tellurobismuthite	Tbi
Strontioignorite	Sgnr	Szklaryite	Sky	Tellurohauecorinite	Thau
Strontiohurlbutite	Shrb	Szmikite	Szm	Telluromandarinoinite	Tmda
Strontiojoaquinite	Sjq	Szomolnokite	Szo	Telluronevskite	Tnvk
Strontiomelane*	Sml	Szymańskiite	Szy	Telluropalladinite	Tpdn
Strontio-orthojoaquinite	Sojq	T		Telluroperite	Tpr
Strontioferroite	Spff	Tacharanite	Tch	Telyushenkoite	Tys
Strontioferrosiderite	Spsd	Tachyhydrite	Thy	Temagamite	Tem
Strontioferroite	Srz	Tadzhikite-(Ce)	Tad-Ce	Tengchongite	Tcg
Strontioferroite	Swht	Taenite*	Tae	Tengerite-(Y)	Ten-Y
Strunzite	Snz	Taikanite	Tka	Tennantite-(Cu)*	Tnt-Cu
Struvite	Suv	Taimyrite-I	Tmy-I	Tennantite-(Fe)*	Tnt-Fe
Struvite-(K)	Suv-K	Tainiolite*	Tai	Tennantite-(Hg)*	Tnt-Hg
Studenitsite	Sdn	Taipingite-(Ce)	Tpg-Ce	Tennantite-(Zn)*	Tnt-Zn
Studtite	Stu	Takanawaite-(Y)	Tkw-Y	Tenonite*	Tnr
Stumpflite	Stm	Takanelite*	Tkn	Tephroite*	Tep
Sturmanite	Strm	Takedaite	Tkd	Terlinguacreekite	Tck
Stützite*	Stz	Takéuchiite	Tké	Terlinguaite	Tlg
Suanite	Sua	Takovite*	Tkv	Ternesite	Tns
Sudburyite	Sdb	Talc*	Tlc	Ternovite	Tno
Sudoite*	Sud	Talmessite*	Tlm	Terranovaite	Tnv
Sudovikovite	Svi	Talnakhite*	Tlk	Terrywallaceite	Twl
Suenoite	Sue	Tamaite	Tam	Terskite	Ter
Suessite	Sss	Tamarugite	Tmr	Tertschite	Trt
Sugakiite	Sgk	Tamboite	Tmb	Teruggite	Tgg
Sugilite*	Sug	Tancaite-(Ce)	Tca-Y	Teschemacherite	Tmh
Suhailite*	Suh	Tancoite	Tco	Tetra-auricupride	Taur
Sulfhydrilbystrite	Shbys	Taneyamalite	Tny	Tetradymite*	Ttd
Sulfoborite	Sbo	Tangdanite	Tdn	Tetraferriannite*	Tfann
Sulphohalite	Slhl	Tangeite	Tg	Tetraferriphlogopite	Tfphl
Sulphotsumoite	Stsm	Taniajacoite	Tjc	Tetraferroplatinum	Tfpt
Sulphur*	S	Tanohataite	Tnh	Tetrahydrite-(Fe)*	Ttr-Fe
Sulphur-β*	S-β	Tantaloeschynite-(Y)	Taes-Y	Tetrahydrite-(Hg)*	Ttr-Hg
Sulvanite	Sul	Tantalcarbide	Tcb	Tetrahydrite-(Zn)*	Ttr-Zn
Sundiusite	Sun	Tantalite-(Fe)	Ttl-Fe	Tetrarooseveltite	Ttroo
Suolunite	Suo	Tantalite-(Mg)	Ttl-Mg	Tetrataenite	Ttae
Suredaite*	Su	Tantalite-(Mn)	Ttl-Mn	Tetrawickmanite	Twm
Surinamite	Sum	Tantalowodginite	Ttwdg	Tewite	Tw
Surite	Sur	Tanteuxenite-(Y)	Ttx-Y	Thadeuite	Thd
Sursassite	Ss	Tantite	Tan	Thalcusite*	Thl
Susannite	Sus	Tapiaite	Tpi	Thalénite-(Y)	Thlé-Y
Suseinargiuite	Sag	Tapiolite-(Fe)*	Tap-Fe	Thalfenite	Tfn
Sussexite	Ssx	Tapiolite-(Mn)*	Tap-Mn	Thalhammerite	Tha
Suzukiite	Suz	Taramellite	Tmel	Thalliomeleane	Tml
Svabite	Sva	Taramite*	Trm	Thalliumpharmacosiderite	Tpsd
Svanbergite*	Svb	Taranakite	Tar	Thaumasite	Tma

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Thebaite-(NH₄)	Thb-NH ₄	Tomamaeite	Tmm	Tsugaruite	Tsg
Thebsite	Ths	Tomichite	Tom	Tsumcorite	Tmc
Thénardite*	Thn	Tondiite	Ton	Tsumebite	Tsu
Theoparacelsite	Thp	Tongbaite	Tgb	Tsumgallite	Tgl
Theophrastite	Tph	Tooeleite*	Toe	Tsumoite*	Tsm
Therasiaite	The	Topaz*	Tpz	Tsygankoite	Tsy
Thérèse magnanite	Tmg	Topsøeite	Top	Tubulite	Tub
Thermaerogenite	Tag	Torbernite*	Tor	Tučekite	Tuč
Thermessaite	Tms	Törnebohmite-(Ce)	Tbh-Ce	Tugarinovite	Tug
Thermessaite-(NH₄)	Tms-NH ₄	Törnebohmite-(La)	Tbh-La	Tugtupite	Ttp
Thermonatrite	Tnat	Törnroosite*	Trs	Tuhualite	Tuh
Thomasclarkite-(Y)	Tcl-Y	Torrecllasite	Trc	Tuite	Tu
Thometzekite	Tmz	Torreyite	Try	Tulameenite*	Tul
Thomsenolite	Tse	Torryweiserite	Tyw	Tuliokite	Tli
Thomsonite-Ca*	Thm-Ca	Tosudite*	Tos	Tululite	Tlu
Thomsonite-Sr*	Thm-Sr	Toturite	Tot	Tumchaite	Tum
Thoraspheite	Tp	Toukrite	Tou	Tundrite-(Ce)	Tnd-Ce
Thorbastnäsite	Tbsn	Tourmaline*	Tur	Tundrite-(Nd)	Tnd-Nd
Thoreaulite	Tre	Townendite	Twn	Tunellite	Tnl
Thorianite*	Tho	Toyohaite*	To	Tungsten (wolfram)*	W
Thorikosite	Thk	Trabzonite*	Trb	Tungstenite	Tgt
Thorite*	Thr	Tranquillityite	Trq	Tungstibite	Tsb
Thornasite	Tna	Transjordanite	Tjrd	Tungstite	Tgs
Thorneite	Tne	Traskite	Tsk	Tungusite	Tgu
Thorostenstrupine	Tssp	Trattnerite*	Tra	Tunisite	Tun
Thortveitite	Tvt	Treasurite	Tsur	Tuperssuatsiaite*	Tup
Thorutite*	Thu	Trébeurdenite	Tré	Turanite	Trn
Threadgoldite	Tdg	Trebiskyite	Tbk	Turkestanite	Tkt
Thunderbayite	Tby	Trechmannite	Trh	Turneaureite	Trr
Tiberiobardiite	Tbd	Tredouxite	Tdx	Turquoise	Tqu
Tiemannite*	Tmn	Trembathite	Tba	Turtmannite	Tt
Tienschanite	Tsh	Tremolite*	Tr	Tuscanite	Tus
Tiettaite	Tie	Trevorite	Trv	Tusionite	Tsn
Tikhonenkovite	Tik	Triangulite	Tri	Tuzlaite	Tuz
Tilasite	Til	Triazolite	Tzl	Tvalchrelidzeite	Tva
Tilkerodeite	Tkr	Tridymite*	Trd	Tvedalite	Tve
Tilleyite*	Tly	Trigonite	Tgn	Tveitite-(Y)	Ttt-Y
Tillmannsite	Till	Trikalsilite	Tks	Tvrđyite	Tvr
Timroseite	Tim	Trilithionite*	Tln	Tweddillite	Twe
Tin (stannum)*	Sn	Trimerite	Tme	Twinnite	Twi
Tinaksite	Tnk	Trimonsite-(Y)	Tmo-Y	Tychite	Tyc
Tincalconite	Tnc	Trinepheline	Tnph	Tyretskite	Tyr
Tinnunculite	Tnn	Triphylite*	Trp	Tyrolite	Tyl
Tinsleyite	Tin	Triplite	Trl	Tyrrellite*	Ty
Tinticite	Ttc	Triploidite	Tpd	Tyuyamunite*	Tyu
Tintinaite	Tti	Trippkeite	Tpk	U	
Tinzenite	Tnz	Tripuhyite	Tpy	Uakitite	Uak
Tiptopite	Tpt	Tristramite	Ttm	Uchucchacuaite	Uch
Tiragalloite	Tga	Tritomite-(Ce)	Tto-Ce	Udinaitite	Udn
Tischendorfite	Tdf	Tritomite-(Y)	Tto-Y	Udumnelite	Udm
Tisinalite	Tis	Trögerite	Tge	Uedaite-(Ce)	Ued-Ce
Tissintite	Tss	Trogtalite*	Trg	Uklonskovite	Ukl
Tistarite	Tta	Troilite*	Tro	Ulexite	Ulx
Titanite*	Ttn	Trolleite	Tll	Ulfanderssonite-(Ce)	Ulf-Ce
Titanium*	Ti	Trona	Tn	Ullmannite	Ull
Titanoholtite	Thlt	Truscottite*	Tst	Ulrichite	Ulr
Titanomaghemite	Tmgh	Trüstedtite	Trü	Ulvöspinel	Uspl
Titanowodginite	Twdg	Tsangpoite	Tpo	Umangite*	Um
Titantaramellite	Ttmel	Tsaregorodtsevite	Tsa	Umbite	Umb
Tivanite	Tiv	Tschaunerite	Tsc	Umbozerite	Uzb
Tlalocite	Tla	Tschermakite	Tsr	Umbrianite	Ubn
Tlapallite	Tpl	Tschermigite	Tmi	Umohoite	Umo
Tobelite*	Tbl	Tschernichite	Tni	Ungavaite	Ugv
Tobermorite*	Tbm	Tschörtnerite	Tht	Ungemachite	Ugm
Tochilinite	Thi	Tsepinite-Ca	Tsp-Ca	Upalite	Upa
Tocornalite	Toc	Tsepinite-K	Tsp-K	Uralborite	Ubo
Todorokite*	Tdr	Tsepinite-Na	Tsp-Na	Uralolite	Url
Tokkoite	Tok	Tsepinite-Sr	Tsp-Sr	Uramarsite	Uaa
Tokyoite	Tky	Tsilaisite	Tsi	Uramphite	Uap
Tolbachite	Tbc	Tsilaisite	Tsl	Uranalcarite	Uca
Tolovkite	Tol	Tsnigrinite	Tng	Uraninite*	Urn

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Uranoclite	Uro	Väyrynenite	Väy	Vuonnemite	Vn
Uranocircite-II	Urc-II	Veatchite	Vea	Vuorelainenite	Vuo
Uranophane-α*	Urp- α	Veblenite	Vebl	Vuorijarvite-K	Vyv-K
Uranophane-β*	Urp- β	Veenite	Vee	Vurroite	Vur
Uranopilite	Up	Velikite	Vel	Vyacheslavite	Vya
Uranopolycrase	Uplc	Vendidaite	Ven	Vyalsovitte	Vyl
Uranosilite	Usl	Verbeekite	Vbk	Vymazalováite	Vym
Uranospathite	Ush	Verbierite	Vbr	Vysokýite	Vys
Uranosphaerite	Us	Vergasovaite	Vgs	Vysotskite*	Vsk
Uranospinite	Usp	Vermiculite*	Vrm	Vyuntspakhkite-(Y)	Vyu-Y
Uranotungstite	Utgs	Vernadite*	Vnd	W	
Urea	Ur	Verneite	Ver	Wadalite	Wdl
Uricite	Uri	Verplanckite	Vpk	Wadeite	Wad
Uroxite	Urx	Versiliaite	Vsl	Wadsleyite*	Wds
Urusovite	Uusv	Vertumnite	Vtn	Wagnerite*	Wag
Urvantsevite	Urv	Veselovskýite	Vlv	Waimirite-(Y)	Wai-Y
Ushkovite	Ukv	Vésigniéite	Vsg	Waipouaite	Wpo
Usovite	Usv	Vestaite	Vst	Wairakite*	Wrk
Ussingite	Usg	Vesuvianite*	Ves	Wairauite	Wra
Ustarasite	Utr	Veszelyite	Vsz	Wakabayashilite	Wak
Usturite	Ust	Vianeite	Via	Wakefieldite-(Ce)	Wf-Ce
Utahite	Uta	Vicanite-(Ce)	Vic-Ce	Wakefieldite-(La)	Wf-La
Uvanite	Uvn	Vigezite	Vgz	Wakefieldite-(Nd)	Wf-Nd
Uvarovite*	Uv	Vigrihinite	Vig	Wakefieldite-(Y)	Wf-Y
Uvite*	Uvt	Vihorlatite	Vih	Walentaite	Wlt
Uytenbogaardite*	Uyt	Viitaniemiite*	Vtm	Walfordite	Wfd
Uzonite	Uzn	Vikingite	Vkg	Walkerite	Wk
V		Villamaninite	Vil	Wallisite	Wal
Vaesite*	Va	Villiumite	Vll	Walkkilldellite	Wlk
Vajdakite	Vaj	Villyaellenite	Vy	Walkkilldellite-(Fe)*	Wlk-Fe
Valentinite	Vln	Vimsite	Vim	Walpurgite	Wpg
Valleriite*	Val	Vincenite*	Vin	Walstromite	Wsl
Valleyite	Vly	Vinciennite	Vcn	Waltherite	Wtr
Vanackerite	Vnk	Vinogradovite	Vgd	Wampenite	Wpn
Vanadinite	Vna	Violarite*	Vio	Wangdaodeite	Wdd
Vanadiocarpolite	Vcar	Virgilite	Vir	Wardite	Wd
Vanadio-oxy-chromium-dravite	Vocdrv	Vishnevite	Vhn	Wardsmithite	Wsm
Vanadio-oxy-dravite	Vodrv	Vismirnovite	Vis	Warikahnite	War
Vanadio-pargasite	Vprg	Vistepite	Vtp	Warkite	Wki
Vanadium*	V	Viteite	Vit	Warwickite	Wwk
Vanadoallanite-(La)	Valn-La	Vitimite	Vti	Wassonite	Was
Vanadoandrosite-(Ce)	Vda-Ce	Vittinkiite	Vtk	Watanabeite*	Wa
Vanadomalayaite	Vmly	Vitusite-(Ce)	Vtu-Ce	Watatsumiite	Wts
Vanalite	Vnl	Vivianite*	Viv	Waterhouseite	Whs
Vanarsite	Vns	Vladimirite	Vld	Watkinsonite*	Wat
Vandenbrandeite	Vbd	Vladimirivanovite	Vla	Wattersite	Wte
Vandendriesscheite	Vdd	Vladkrivovichevite	Vkv	Wattevilleite	Wtv
Vanderheydenite	Vhy	Vladyslavite	Vdy	Wavellite*	Wav
Vandermeerscheite	Vme	Vlasovite	Vsv	Wawayandaite	Waw
Vaniniite	Vnn	Vlodavetsite	Vlo	Waylandite	Way
Vanmeersscheite	Vms	Vochtenite	Voc	Wayneburnhamite	Wbh
Vanoxite	Vnx	Voggite	Vog	Weberite	Web
Vantasselite	Vts	Voglite	Vgl	Weddellite	Wed
Vanthoffite	Vhf	Volaschioite	Vsh	Weeksite	Wks
Vanuralite	Vnr	Volborthite	Vbo	Wegscheiderite	Weg
Vapnikite	Vpn	Volkonskoite*	Vkn	Weibullite	Wbl
Varnnesite*	Vrn	Volkovskite	Vlk	Weilerite	Wlr
Vargite	Vg	Voloshinite	Vls	Weilite	Wei
Variscite*	Var	Voltaite*	Vlt	Weinebeneite	Wbn
Varlamoffite	Vlm	Volymskite*	Vol	Weishanite	Whn
Varulite*	Vr	Vonbezingsite	Vbz	Weissbergite	Wsb
Vashegyite	Vhg	Vonsenite*	Von	Weissite*	Wst
Vasilite	Vs	Vorlanite	Vrl	Welinite	Wln
Vasilseverginite	Vas	Voronkovite	Vrk	Weloganite	Wlg
Vasilyevite	Vsy	Vorontsovite	Vor	Welshite	Wel
Västmanlandite-(Ce)	Vml-Ce	Voudourisite	Vou	Wendwilsonite	Wdw
Vaterite*	Vtr	Vozhminite	Voz	Wenkite	Wen
Vaughanite	Vgh	Vránaite	Vrá	Weringite*	Wrd
Vauquelinite	Vql	Vrbaite	Vrb	Wermlandite*	Wld
Vauxite	Vx	Vuagnatite	Vgn	Wernerbaurite	Wbr
Vavřinite	Vav	Vulcanite	Vul	Wernerkrauseite	Wkr

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Wesselsite	Wes	Wycheproofite	Wyc	Zaccagnaite	Zac
Westerveldite	Wvd	Wyllieite*	Wyl	Zaccariniite	Zcr
Wetherillite	Wet	X		Zadovite	Zad
Wheatleyite	Wty	Xanthiosite	Xth	Zagamiite	Zag
Whelanite	Wla	Xanthoconite	Xcn	Zaherite	Zah
Wherryite	Whr	Xanthoxenite	Xox	Zairite	Zai
Whewellite	Whe	Xenophyllite	Xp	Zakharovite	Zak
Whitecapsite	Wcp	Xenotime-(Y)*	Xtm-Y	Zálesiite	Zál
Whiteite-(CaFeMg)	Wt-CaFeMg	Xenotime-(Yb)*	Xtm-Yb	Zanazziite	Zan
Whiteite-(CaMgMg)	Wt-CaMgMg	Xiangjiangite	Xjg	Zangboite	Zgb
Whiteite-(CaMnMg)	Wt-CaMnMg	Xieite	Xi	Zapatalite	Zap
Whiteite-(CaMnMn)	Wt-CaMnMn	Xifengite	Xif	Zaratite	Zar
Whiteite-(MnFeMg)	Wt-MnFeMg	Xilingolite	Xil	Zavaliaite	Zvl
Whiteite-(MnMnMg)	Wt-MnMnMg	Ximengite	Xim	Zavaritskite	Zav
Whiterockite	Wrc	Xingzhongite	Xin	Zaykovite	Zay
Whitlockite*	Wht	Xitieshanite	Xit	Zdeněkite	Zde
Whitmoreite*	Whm	Xocolatlite	Xoc	Zektzerite	Zek
Wickenburgite	Wbu	Xocomecatlite	Xco	Zellerite	Zel
Wickmanite	Wm	Xonotlite	Xon	Zemannite	Zem
Wicksite	Wic	Xuite	Xu	Zemkorite	Zmk
Widenmannite	Wdm	Y		Zenzénite	Zen
Widjemoalthalite	Wmo	Yafsoanite	Yaf	Zeolite*	Zeo
Wightmanite	Wmn	Yagiite	Yag	Zeophyllite	Zp
Wiklundite	Wik	Yakhontovite*	Ykh	Zeravshanite	Zer
Wilancookite	Wck	Yakovenchukite-(Y)	Yak-Y	Zeunerite	Zeu
Wilcoxite	Wcx	Yakubovichite	Ybv	Zhanghengite	Zhg
Wildcatite	Wct	Yancowinnaite	Ycw	Zhanghuifenite	Zhf
Wildenauerite	Wda	Yangite	Ygi	Zhangpeishanite	Zph
Wilhelmgümbelite	Wgü	Yangzhumingite*	Yzh	Zharchikhite	Zha
Wilhelmkleinite	Wkl	Yanomamite	Yan	Zhemchuzhnikovite	Zhe
Wilhelmramsayite	Wrm	Yarlongite	Ylg	Zhiqinite	Zhi
Wilhelmvierlingite	Wvl	Yaroshvskite	Yro	Ziesite	Zie
Wilkinsonite	Wkn	Yaroslavite	Ysl	Zigrasite	Zig
Wilksmanite	Wkm	Yarrowite*	Yar	Zimbabweite	Zbb
Willemite*	Wlm	Yarzhemskiiite	Yzm	Ziminaite	Zim
Willemseite*	Wls	Yavapaiite	Yav	Zinc*	Zn
Willhendersonite	Whd	Yazganite	Yaz	Zincalstibite	Zas
Wilyamite	Wly	Yeatmanite	Ytm	Zincaluminite	Zna
Wiluite	Wil	Yecoraite	Yec	Zincgartrellite	Zgtl
Winchite*	Wnc	Yedlinite	Yed	Zincite*	Znc
Windhoekite*	Whk	Ye'elimite	Ye	Zinclipscumbite	Zlcb
Windmountainite	Wmt	Yegorovite	Yeg	Zincmelanterite	Zmln
Winstanleyite	Wsn	Yeomanite	Yeo	Zincoberaunite	Zbru
Wiserite	Wis	Yimengite	Yim	Zincobotryogen	Zbyg
Witherite*	Wth	Yingjiangite	Yin	Zincobradaczekite	Zbdc
Wittichenite*	Wtc	Yixunite	Yix	Zincobriartite	Zbtt
Wittite	Wit	Yoderite	Yod	Zincochromite	Zchr
Witzkeite	Wzk	Yofortierite*	Yof	Zincoconiopite	Zcpi
Wodginite*	Wdg	Yoshimuraite	Ysh	Zincohögbomite-2N2S	Zhög-2N2S
Wöhlerite	Wöh	Yoshiokaite	Yos	Zincohögbomite-2N6S	Zhög-2N6S
Wolfeite	Wol	Yttriaite-(Y)	Yt-Y	Zincolibethenite	Zlib
Wollastonite*	Wo	Yttrialite-(Y)	Ytt-Y	Zincolivenite	Zoli
Wölsendorfite	Wsd	Yttrocolumbite-(Y)	Yclb-Y	Zincomenite	Znm
Wonesite*	Wns	Yttrocrasite-(Y)	Ycr-Y	Zinconigerite-2N1S	Zng-2N1S
Woodallite	Wod	Yttrotantalite-(Y)	Yttl-Y	Zinconigerite-6N6S	Zng-6N6S
Woodhouseite	Wdh	Yttrotungstite-(Ce)	Ytgs-Ce	Zincospiroffite	Zspf
Woodruffite	Wdr	Yttrotungstite-(Y)	Ytgs-Y	Zincostaurolite	Zst
Woodwardite	Wwd	Yuanfuliite	Yfl	Zincostrunzite	Zstz
Woolldridgeite	Woo	Yuanjiangite	Yjg	Zincovelesite-6N6S	Zcv-6N6S
Wopmayite	Wop	Yugawaralite*	Yug	Zincovoltaita	Zvlt
Wrightite	Wgh	Yukonite*	Yuk	Zincowoodwardite	Zwwd
Wroewolfeite	Wwf	Yuksporite	Yks	Zincrosasite	Zrss
Wulfenite*	Wul	Yurgensonite	Ygs	Zincroselite	Zrsl
Wulffite	Wlf	Yurmarinite	Ymr	Zincsilite*	Zs
Wülfingite	Wfg	Yushkinita	Yus	Zinczippeite	Zzip
Wumuite	Wum	Yusupovite	Ypv	Zinkenite	Zkn
Wupatkiite	Wup	Yuzuxiangite	Yuz	Zinkgruvanite	Zgv
Wurtzite*	Wur	Yvonite	Yv	Zinkosite	Zin
Wüstite*	Wüs	Z		Zinnwaldite*	Znw
Wuyanzhiite	Wuy	Žabiřkiite	Žbk	Zippeite	Zip
Wyartite	Wya	Zabuyelite	Zab	Zircon*	Zrn

(Continued)

Table 1. (Continued.)

Name	Symbol	Name	Symbol	Name	Symbol
Zirconolite*	Zrc	Zoharite	Zoh	Zuktamrurite	Zuk
Zircophyllite*	Zcp	Zodacite	Zod	Zunyite*	Zun
Zircosulfate	Zrs	Zoisite*	Zo	Zussmanite*	Zus
Zirkelite	Zke	Zolenskyite	Zsk	Zvěstovite-(Zn)	Zvě-Zn
Zirklerite	Zkl	Zolotarevite	Zlo	Zvyaginite	Zvy
Zirsilite-(Ce)	Zir-Ce	Zoltaiite	Zol	Zvyagintsevite*	Zv
Zirsinalite	Zsl	Zorite	Zor	Zwieselite	Zwi
Zlatogorite	Zla	Zoubekite*	Zou	Zýkaite	Zýk
Znamenskyite	Zms	Zubkovaite	Zub		
Znucalite	Znu	Zugshunite-(Ce)	Zug-Ce		

(e.g. **chaoite** = Ch). The most common are the first three letters of a name (e.g. **cyanotrichite** = Cya), which provides the best compromise between having a relatively short symbol and having enough letters to give away the character of the name. There are also some rare instances of using the first four letters of a name, but only when shorter options are not available (e.g. **mitscherlichite** = Mits). This category of abbreviations make up 28% of the listing.

- (2) A combination of two to four letters considered characteristic of the mineral name. At least two of the letters of this type of symbol are usually clustered together to highlight a characteristic section of the name that aids its recognition (e.g. **ewingite** = Ewg or **neighborite** = Nbo). These types of abbreviation make up 32% of the database.
- (3) A selection of two to four letters expressing components of the name. These represent the initial letter of a name component in terms of how the word is pronounced (e.g. **hellandite** = Hld) or as the initial letter of a selected syllable in the word (e.g. **adranosite** = Arn). This type of symbol makes up 28% of the collection.
- (4) Four or more lettered abbreviations when prefixes are present (e.g. ferro-, ferri, and magnesio-). These are used when related mineral symbols have been previously defined and the letters are selected to preserve consistency between the mineral abbreviations. (e.g. **chlorocalcite** = Ccal, or **monohydrocalcite** = Mhcal, where **calcite** = Cal). Longer abbreviations are also selected if short ones are no longer available. (e.g. **natrozippeite** = Nzip and **nickelzippeite** = Nizip, where **zippeite** = Zip). This symbol type comprises ca. 12% of the database.

A collection of symbols was compiled by first listing published mineral abbreviations from recognised contributions. In the case of conflicting symbols used for the same mineral, for example, Qtz (Kretz, 1983) or Qz (Whitney and Evans, 2010) for **quartz**, those proposed by Whitney and Evans (2010) were prioritised. Some departure from this published study was, however, introduced to remove symbols that correspond to elements. In this context, Po, Fl, Mc and Ts have been replaced (using method 2) with the Kretz symbols of Pyh, Flr, Mcc and Tsr for the minerals **pyrrhotite**, **fluorite**, **microcline** and **tschermakite**, respectively. Other departures from the Whitney and Evans (2010) listing are abbreviations that require prefixes following method (4) so that these abbreviations (12 in total) are consistent with existing mineral symbols (e.g. **ferro-actinolite** = Fact, whereby by **actinolite** = Act). This modification was also required to generate a sufficient number of abbreviations for the complete collection of minerals that cannot be covered by using two- and three-letter symbols alone. Despite these differences, the symbols are 93% compatible with Kretz

(1983), 87% with Siivolam and Schmid (2007), 97% with Whitney and Evans (2010), 75% with *The Canadian Mineralogist* (2019) listings and 100% with Warr (2020).

To add further diversity and character to new symbols, language-related lettering from the original mineral names was introduced (e.g. **löllingite** = lö and **švenekite** = Švn). It is assumed that suitable multilingual text software is now standard to both authors and journals, which may not have been the case in the past. Abbreviations were also selected to reflect their origin, such as people's names (e.g. **earlshannonite** (Earl Shannon) = Esn) or place names (e.g. **clearcreekite** = Cck) to which the minerals are dedicated. The symbols for specific mineral species containing elemental information are listed in full (e.g. **anzaite-(Ce)** = Anz-Ce or **allanite-(Ce)** = Aln-Ce. In the absence of such element information, the mineral symbol can be used in its less specific form (e.g. **anzaite** = Anz or **allanite** = Aln). In the case of mineral phases requiring extensive elemental information for species description, which can lead to long notations, (e.g. **jahnsite-(CaFeMg)** = Jah-CaFeMg), such abbreviations can also be used in their shortened version (e.g. **jahnsite** = Jah) by defining the species in the text on the first occurrence or in the relevant figure or table caption where the symbol is used.

The collection listed in Table 1 includes the 31 elements that occur as native minerals. Although most of Kretz's pre-existing mineral symbols and those by Whitney and Evans (2010) are adopted, all new symbols have been chosen to maximise consistency in the database so that common mineral names are ideally denoted by the same symbols (e.g. **pseudosinhalite** = Pshl, where P = **pseudo**, Shl = **sinhalite** and Hl = **halite**). Where possible, the same symbols are maintained for reoccurring name components such as cb for **carbide** in **niobocarbide** (Ncb) or **tantalcarbide** (Tcb). Additionally, elemental information was retained in symbols (e.g. **bismuth** = Bi, **bismite** = Bis and **bismutite** = Bit), as long as this did not conflict with the four methods of nomenclature applied and the need to keep abbreviations as short as possible. Symbols were selected to minimise the average length and, as a whole, the longer names are generally attributed with longer abbreviations. The complete library of mineral symbols, which covers all IMA-CNMNC approved species from the May 2021 version of IMA mineral listing (Pasero, 2021), is based on 4 one-lettered symbols, 260 two-lettered symbols, 4205 three-lettered symbols and 1275 four (or more) lettered symbols including specific elemental notations. In addition to the 5703 currently approved species, the library also contains 41 group and subgroup names inherited from the symbols list of Kretz (1983), Whitney and Evans (2010) and Warr (2020). These cover many common mineral names such as **feldspar** (Fsp), **amphibole** (Amp), **pyroxene** (Px), **chlorite** (Chl) and **biotite** (Bt).

A more detailed mineral symbol dataset is provided as Supplementary material. This can be used as a search and match tool for locating mineral names and their recommended symbols. Lists of symbols used for common name components are also given at the base of the datasheet sorted by mineral. New mineral abbreviations can be selected using the 'symbol picker' from the list of available symbols included in the supplementary material. These are to be submitted for approval to the CNMNC as part of a mineral name proposal. New listings of symbols will appear on the official IMA–CNMNCs website and in related publications such as the IMA–CNMNC newsletter (Mills, 2010).

Supplementary material. To view supplementary material for this article, please visit <https://doi.org/10.1180/mgm.2021.43>

Acknowledgements. I would like to thank all CNMNC members for their feedback on this contribution during the approval process and the two anonymous reviewers for their constructive comments.

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