

Amorphous Mineral Species (not including metamict species, U/Th-bearing species, organic mixtures, or unapproved minerals)

Amorphous

Mineral	IMA Formula; other formula	IMA status	HOM	Mindat	RRUFF	Selected Reference(s)	Comments
allophane	Al ₂ O ₃ (SiO ₂) _{1.3-2.0-2.5-3.0} H ₂ O	G	y	y	2	Clays & Clay Min 33 (1985) 237-243; Am Min 106 (2021) 527-54C	
angastonite	CaMgAl ₂ (PO ₄) ₂ (OH) ₄ ·7H ₂ O	Rd	y	y	<i>n</i>	European Journal of Mineralogy 34 (2022), 215-221	
diadochite	Fe ₂ (PO ₄)(SO ₄)(OH)·6H ₂ O	G	y	y	1	Clays & Clay Min 47 (1999) 1-11	X-ray amorphous; compare triclinic destinezite
evansite	Al ₃ (PO ₄)(OH)6·8H ₂ O	G	y	y	1	Can Min 33 (1995) 59-65	
georgeite	Cu ₂ (CO ₃)(OH) ₂	Rd	y	y	<i>n</i>	Min Mag 55 (1991) 163-166	
metastibnite	Sb ₂ S ₃	G	y	y	1	Dokl Akad Nauk SSSR 237 (1977) 937-940	
meymacite	WO ₃ ·2H ₂ O	Rd	y	y	<i>n</i>	Bull Soc fr Mineral 88 (1965) 613-617	
opal	SiO ₂ ·nH ₂ O	G	<i>n</i>	y	11	Powder Diffraction 13 (1998) 1-19; Am Min 60 (1975) 749-757	
santabarbaraite	Fe ₃ (PO ₄) ₂ (OH) ₃ ·5H ₂ O	A	y	y	<i>n</i>	Eur J Min 15 (2003) 185-192	
bolivarite	Al ₂ (PO ₄)(OH) ₃ ·4H ₂ O	Q	<i>n</i>	y	<i>n</i>	Can Min 33 (1995) 59-65	may be equivalent to evansite
lechatelierite	SiO ₂	Q	<i>n</i>	y	<i>n</i>	Radiochem Radioanalyt Lett 54 (1982) 197-208	
pitticite	[Fe,AsO ₄ ,SO ₄ ,H ₂ O] (?)	Q	y	y	<i>n</i>	Min Mag 46 (1982) 261-264	
richellite	CaFe ₂ (PO ₄) ₂ (OH,F) ₂	Q	y	y	<i>n</i>	Am Min 48 (1963) 300-307, Min Rec 26 (1995) 449-465	
rosièresite	[Pb,Cu,Al,PO ₄ ,H ₂ O] (?)	Q	y	y	<i>n</i>	Dana (1951) volume II, 924	

A = approved; G = grandfathered (pre-1958); Rd = redefined; Q = questionable (poorly characterized, validity could be doubtful)

Amorphous to Poorly Crystalline

Mineral	IMA Formula; other formula	IMA status	HOM	Mindat	RRUFF	Selected Reference(s)	Comments
hisingerite	Fe ₂ Si ₂ O ₅ (OH) ₄ ·2H ₂ O	G	y	y	2	Clays & Clay Min 46 (1998) 400-413	monoclinic kaolinite-like structure by TEM
imogolite	Al ₂ SiO ₃ (OH) ₄	Rd	y	y	<i>n</i>	Clays & Clay Min 33 (1985) 237-243; Am Min 106 (2021) 527-54C	TEM diffraction pattern
jordisite	MoS ₂	G	y	y	1	Am Min 86 (2001) 852-861	electron diffraction shows layered structure
neotocite	(Mn,Fe)SiO ₃ ·H ₂ O(?)	G	y	y	<i>n</i>	Min Mag 42 (1978) 279-280; Clay Minerals 18 (1983) 21-31	
yukonite	Ca ₂ Fe ₃ (AsO ₄) ₃ (OH) ₄ ·4H ₂ O	G	y	y	1	Environ Sci: Nano 7 (2020) 3735-3745, Min Mag 70 (2006) 73-81	nanocrystallinity shown by TEM and synchrotron
belyankinite	Ca ₁₋₂ (Ti,Zr,Nb) ₅ O ₁₂ ·9H ₂ O (?)	Q	y	y	<i>n</i>	Doklady Akademii Nauk SSSR 71 (1950), 925-927	biaxial negative; weak Laue pattern
ilsemanite	Mo ₃ O ₈ ·nH ₂ O (?)	Q	y	y	1	Am Min 36 (1951) 609-614	weak XRD pattern
varlamoffite	(Sn,Fe)(O,OH) ₂ ;Sn ₂ FeO ₅ (OH)	Q	<i>n</i>	y	<i>n</i>	Mineral Zhurnal 15 (1993) 94-101; Am Min 80 (1995) 850	XRD lines indicate structure similar to cassiterite
zaratite	Ni ₃ (CO ₃)(OH) ₄ ·4H ₂ O	Q	y	y	1	Eur J Min 25 (2013) 995-1002	weak XRD pattern

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