

Basic use of IMA Database of Mineral Properties

IMA Database of Mineral Properties
Created and maintained by the RRUFF Project in partnership with the IMA.

Search: IMA Approved Minerals Only

- Denisovite
- Denningite
- Depmeierite
- Derbylite
- Derriksite
- Dervillite
- Desautelsite
- Descloizite
- Despujolsite
- Dessaute-(Y)
- Destinezite
- Deveroite-(Ce)
- Devilline
- Devitoite
- Dewindtite
- Diaboleite
- Diadochite
- Diamond

Minerals found: 5433

Search interface

<http://rruff.info/ima/>

1. Find all vanadium oxide minerals

The screenshot shows the RRUFF search interface. At the top left is a search bar and a checkbox for "IMA Approved Minerals Only". Below the search bar is a list of minerals found: Karelianite, Oxyvanite, Paramontroseite, and Shcherbinaite. A red box highlights this list, and two red arrows point from the text "2. Select 'Cell parameters' from right" to it. In the center, the text "Minerals found: 4" is displayed above a "Hide Selected Minerals" button. Below that is a "Search Tags" section with a "clear all" button. At the bottom, there are three sections: "ALL OF:", "AT LEAST ONE OF:", and "NONE OF:". The "ALL OF:" section contains the text "V,O" which is highlighted with a red box. The "AT LEAST ONE OF:" section contains the text "all" which is also highlighted with a red box. To the right of these sections is a "Contains the string ?" input field. Below these fields is a "Mineral Chemistry Includes:" section with a "Clear Chemistry" button and a "Exclude all non-selected" link. A large red arrow points from the text "3. Selecting a mineral gives you a list of structure information on the right" to this "Mineral Chemistry Includes:" section. At the very bottom, there is a row of element symbols: H, Li, Be, Na, Mg, K, Ca, Sc, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Rb, Sr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Cs, Ba, *, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn, Fr, Ra, ***, * La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, ** Ac, Th, Pa, U.

2. Select "Cell parameters" from right

The screenshot shows the RRUFF search interface with the "Cell Parameters" checkbox selected in the "Chemistry" section. Other checkboxes for RRUFF, IMA, and Cell Parameters are also checked. Below the chemistry section are buttons for "HOM", "AMCSD", "RRUFF", and "REFERENCES". Underneath these buttons are links for "EVOLUTION", "GOOGLE", "GOOGLE IMAGES", "MINDAT", "WEBMIN", "WIKIPEDIA", and "Edit". Red text at the bottom left says "Click 'HOM' for a PDF listing of the properties" and "Click AMCSD for a CIF file of the selected mineral".

3. Selecting a mineral gives you a list of structure information on the right

	mineral name	chemistry	a	b	c	α	β	γ	crystal system	space group
Autofill	Karelianite	V ₂ O ₃	4.952	4.952	14.002	90	90	120	hexagonal	R ₃ c
Autofill	Karelianite	V ₂ O ₃	4.9521	4.9521	14.0024	90	90	120	hexagonal	R ₃ c
Autofill	Karelianite	V ₂ O ₃	4.9322	4.9322	13.991	90	90	120	hexagonal	R ₃ c
Autofill	Karelianite	V ₂ O ₃	4.9199	4.9199	13.9787	90	90	120	hexagonal	R ₃ c
Autofill	Karelianite	V ₂ O ₃	4.9018	4.9018	13.969	90	90	120	hexagonal	R ₃ c
Autofill	Karelianite	V ₂ O ₃	5.46	5.46	5.46	53.82	53.82	53.82	hexagonal	R ₃ c

Export options

On the left search panel, below the periodic table, you export further information about the found minerals by clicking "View in table format"

Export Options [Hide](#)

Mineral Name (plain) RRUFF Chemistry (plain) RRUFF Chemistry (concise) RRUFF Chemistry (HTML) Chemical Elements RRUFF IDs IMA Number Database ID Mineral Name (HTML) IMA Chemistry (plain) IMA Chemistry (concise) IMA Chemistry (HTML) Structural Groupname Fleischers Groupname IMA Status Status Notes

Country Year First Published

[DOWNLOAD CSV](#) [VIEW IN TABLE FORMAT](#) [VIEW AS BULLETED LIST](#)

Mineral Name	RRUFF Chemistry (plain)	Country of Type Locality	Year First Published
Karelianite	$V^{3+}O_3$	Finland	1963
Oxyvanite	$V^{3+}V^{4+}O_5$	Russia	2008
Paramontroseite	$V^{4+}O_2$	USA	1955
Shcherbinaite	$V^{5+}O_5$	Russia	1971

Cell parameter search

First click Clear Chemistry in the periodic table

Cell Parameter Search Controls [Hide](#)

Use Search Controls

Crystal system: tetragonal Lattice: Lattice

Point group: 4/m2/m2/m Space group: P4/mmm SG List

a: b: c: 1% Tol

a: β: γ: 10% Tol

volume:

Use Literature Use RRUFF Use AMCS

Search Entire List Reset

Useful if you need to find minerals with certain crystal symmetry and cell parameters

mineral name	chemistry
Arsenohauchecornite	
Bortnikovite	$[(\text{Pd}_{3.822}\text{Pt}_{0.145})_{3.967}\text{Cu}_{2.998}(\text{Zn}_{0.857}\text{Fe}_{0.177})_{1.034}]$
Ferronickelplatinum	(Ni.5 Fe.5) Pt
Hauchecornite	Bi1.3 Sb.7 Ni9 S8
Linzhiite	FeSi ₂
Linzhiite	Fe Si2
Macedonite	Pb Ti O3
Muirite	Ba10 (Ca2 Mn Ti) Si8 O32 Cl8 H12
Muirite	Ba9.5 Ca3.5 Ti Si8 O36 Cl4 H12
Potarite	Hg Pd
Tellurohauchecornite	
Tetraferroplatinum	Fe Pt
Tetrataenite	Fe Ni
Tulameenite	(Cu.5 Fe.5) Pt