

Garnet $[X_3Y_2(SiO_4)_3]$

“Garnet” is the name given to a group of silicate minerals that exhibit dodecahedron or cubic crystal habits. The group contains six varieties that differ by chemical composition which alters the minerals coloration: pyrope (dark red), almandine (purple red), spessartine (orange- yellow), grossular (green-yellow), uvarovite (deep green) and andradite (grayish brown-black). Almandine garnets, such as the ones in this specimen, occur in skarns developed in contact metamorphosed zones in alkali igneous rocks. OR24



Garnet in Mica Schist OR24

Garnet var. Uvarovite and Demantoid $[(Ca_3Cr_2(SiO_4)_3]$

Garnets are distinctive due to their dodecahedral, or soccer ball-shaped, crystal habit. The greenish-blue color of uvarovite occurs due to the high ratio of chromium to calcium in the chemical formula. Uvarovite is one of the rarest of the garnet minerals and have been used in jewelry due to their outstanding color and brilliance. Typically found within chromium ore deposits, uvarovite garnets have been discovered in Spain, Russian and Quebec. Uvarovite is commonly mistaken for emeralds, the green variety of beryl. B21



Garnet var. Uvarovite B60



Garnet var. Demantoid B60