

GARNET

Garnets are a set of closely related minerals forming a group, with gemstones in almost every color.



ABOUT GARNET



Red garnets have a long history, but modern gem buyers can pick from a rich palette of garnet colors: greens, oranges, pinkish oranges, deeply saturated purplish reds, and even some blues.

Red garnet is one of the most common and widespread of gems. But not all garnets are as abundant as the red ones. A green garnet, tsavorite, is rarer and needs rarer rock chemistries and conditions to form.

BIRTHSTONES & ANNIVERSARIES

Garnet is the birthstone for January and the gem for the second anniversary.

TREATMENTS

There are a number of processes used to alter the color, apparent clarity, or improve the durability of gems.

SYNTHETICS

Some gemstones have synthetic counterparts that have essentially the same chemical, physical, and optical properties, but are grown by man in a laboratory.

IMITATIONS

Any gem can be imitated—sometimes by manmade materials or by natural materials chosen by man to impersonate a particular gem.

TSAVO PARK

Campbell Bridges mined tsavorite garnet in Kenya near Tsavo National Park.

FABERGE

The imperial Russian jeweler created intricate jewelry designs for demantoid garnet.

3800 BC

A stylish red garnet bead necklace found in a grave in Egypt is more than 5,000 years old.

FACTS

MINERAL: Garnet group

CHEMISTRY:

Almandine- $\text{Fe}_3\text{Al}_2(\text{SiO}_4)_3$
Andradite- $\text{Ca}_3\text{Fe}_2(\text{SiO}_4)_3$
Grossular- $\text{Ca}_3\text{Al}_2(\text{SiO}_4)_3$
Pyrope- $\text{Mg}_3\text{Al}_2(\text{SiO}_4)_3$
Rhodolite- $(\text{Mg}, \text{Fe})_3\text{Al}_2(\text{SiO}_4)_3$
Spessartine- $\text{Mn}_3\text{Al}_2(\text{SiO}_4)_3$

Color: All colors

REFRACTIVE INDEX: 1.714-1.888

SPECIFIC GRAVITY: 3.47-4.15

Mohs Hardness: 6.5-7.5



WHY WE LOVE THIS GEMSTONE

GEMOLOGICAL CHALLENGE

Figuring out how each new gem garnet fits into the six main mineral species is a challenge for gemologists.

HORSETAIL INCLUSIONS

Horsetail inclusions in green demantoid garnet are one of the few internal features that increase a gem's value.

FIRE

Due to demantoid garnet's high dispersion, well-cut, fashioned gems display an amazing amount of fire.