

GEM Guide

Free Guide to buying Quality Gem Stones
From SimplySapphires.com

Copyright 1999 All rights reserved

Note: use the arrow keys above to navigate through the guide



1. [Sapphires](#)
2. [Fancy Sapphires](#)
3. [Tanzanite](#)
4. [Emeralds](#)
5. [Rubys](#)
6. [Opals](#)
7. [Garnet](#)
8. [GIA Codes](#)
9. [Charts](#)

Buying Sapphires.

Buying Tanzanite.

Buying Emeralds.

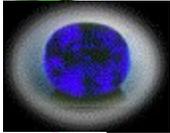
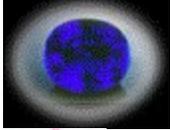
Buying Rubys.

Buying Opals.

Buying Garnet.

GIA Abbreviation Codes .

Buying Charts.





Sapphires

Blue Sapphires- The most valuable sapphires have a medium intense, vivid blue color. The best sapphires hold the brightness of their color under all different types of lighting. Any black, gray, or green overtones mixed in with the blue will reduce a stone's value. In general, a more pastel blue would be less preferred than a vivid blue but would be priced higher than an overdark blackish blue color.

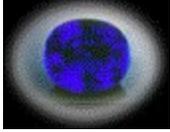
As with all gemstones, sapphires which are "clean" and have few visible inclusions or tiny flaws are the most valuable. However some very fine sapphires, in particular those from Kashmir, have a velvety mist-like texture which enhances the richness of the blue. Inclusions and color zoning are a common occurrence in sapphires and unless extreme in either case, does not impact the beauty of the stone.

Color zoning is when the sapphire displays dark and light zones of color running parallel to each other. Inclusions are the presence of foreign materials inside the gemstone that are trapped during the crystal growing stage. Although inclusion in sapphires effect the value of the stone, it is not as reprehensible as being present in diamonds. Inclusions are identifying characteristics, which also proves the genuine nature of the gem.

The sapphire was noted as a regal gem by Damigeron, who asserted that kings wore it about their necks as a powerful defense against harm. The ancient Persians believed that the earth rested on a giant sapphire and its reflection colored the sky.

Hardness 9

How to clean Warm soapy water. Ultrasonic and steamer usually safe. Rubies and sapphires can be cleaned with a touch of ammonia in water to remove all films and add extra sparkle.



Sapphire



Padparadscha Sapphire

Fancy Sapphires - Sapphire is often considered to be synonymous with the color blue: you can easily picture a swaying sapphire sea. However, sapphire is beautiful beyond blue, in every color but red, because red is called ruby.

The most valuable fancy sapphire is a orange-pink or pinkish-orange called "padparadscha" after the lotus blossom. Other very popular shades of fancy sapphires are yellows, bright oranges, lavender and purples, and a bluish green color. Generally, the more clear and vivid the color, the more valuable the fancy sapphire.

If the color is in the pastel range, the clarity should be good: because in lighter tones inclusions are more noticeable. In a lighter colored gemstone, the cut is also more important: it should reflect light back evenly across the face of the stone, making it lively and brilliant. With darker more intense colors, the cut isn't as critical because the color creates its own impact

Tanzanite- Tanzanite is relatively new on the gemstone market, but has left its mark. Its rich purples and blues often have a depth comparable to the finest sapphire. First found in 1967, and named by Tiffany and Co after the country it calls home, it has since become a well known and widely distributed gemstone, it is best set in less exposed, less active pieces of jewelry, like earrings and pendants. When mounted in a ring or bracelet choose a low setting that will help protect the tanzanite.

Do not wear tanzanite jewelry during activities that may result in the tanzanite being chipped or scratched. And, when not being worn tanzanite jewelry should be stored in individual cloth pouches, so that the gemstone is not inadvertently abraded by your other jewels and gemstones. The source of its mesmerizing color is that tanzanite is trichroic: that is, it shows different colors when viewed in different directions.

One direction is blue, another violet, and another bronze, adding subtle depths to the color. Tanzanite is generally available with only minor inclusions that are not visible to the naked eye. Please keep in mind that color is the most important value factor in the purchase of this gemstone, so you want the emphasis to be on intense color and brilliance.

Hardness: 6-7

How to clean: Warm soapy water, Do not use a ultrasonic cleaner



Tanzanite

Emeralds- When choosing an emerald, the most important value factor to consider is color. The more vivid the green, the more valuable the emerald. There are also attractive bright stones with a lighter green color that often make a spectacular piece of jewelry. Darker green emeralds may also make up in rich color what they lose in brightness.

Because emeralds are so rare without inclusions, some inclusions are expected and do not detract from the value of the stone as much as with other gemstones. However, you should look to make sure that fissures and inclusions do not go too deep into the stone so that it might be weakened enough to break if it were hit accidentally. The fissures and fractures that are characteristic of emerald are traditionally filled with oil to minimize their impact.

Emerald is a beryl, a mineral that is normally colorless. Emerald's rich green color is caused by minute traces of chromium. The Romans loved emeralds because, as ancient scholar Pliny said, "nothing greens greener." Pliny said that emerald was the only gem which delighted the eye without fatiguing it.

One legend says that Satan lost the emerald from his crown when he fell. The emerald was shaped into a bowl which the Queen of Sheba sent to Nicodemus. Christ used the bowl at the last supper and Joseph of Arimathea used the bowl to catch blood from the cross, founding the order of the Holy Grail.

How to clean: Warm soapy water

Hardness: 7 1/2-8



Emerald

Rubys- In colored gemstones such as rubies, the actual color is much more important than clarity or cut. Even subliminal differences in shade can cause the price to change dramatically.

The top qualities are as red as you can imagine: a saturated pure spectral hue without any overtones of brown or blue. The word red is derived from the latin for ruby, ruber, which is derived from similar words in Persian, Hebrew, and Sanskrit. The intensity of color of a fine ruby is like a glowing coal, probably the most intensely colored substance our ancestors ever saw. All colors of corundum except red are known as sapphires, which has created controversy about where ruby ends and sapphire begins, particularly in pink shades of corundum.

In 1991, the International Colored Gemstone Association ruled that the lighter shades of the reddish hues of corundum should be included in the category of ruby.

Ruby has been the world's most valued gemstone for thousands of years. Ruby was said to be the most precious of the twelve stones God created when he created all things and this *lord of gems* was placed on Aaron's neck by God's command. The bible says that wisdom is more precious than rubies, that is to say that makes it very valuable indeed. In the ancient language of Sanskrit, ruby is called *ratnaraj*, or king of precious stones and *ratnanayaka*, leader of precious stones. The glowing hue of the ruby suggested that an inextinguishable flame burned inside this stone, the assertion was that the inner fire could not be hidden through clothing or any material that might be wrapped around the stone.

How to clean: Warm soapy water. Ultrasonic and steamer usually safe

Hardness: 9

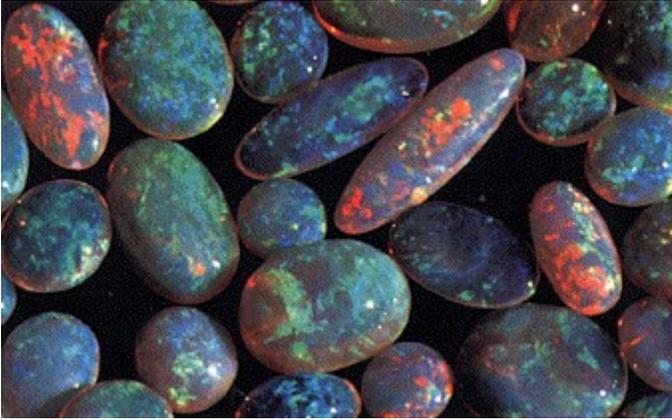


Ruby

Opal- Within each opal variety, the brilliance of the play of color is the most important value factor. After this consideration, the colors seen and the pattern of the colors will also influence value. Generally, opal with red fire is the most valued because opal that shows red will also show other colors when rolled back and forth: it contains the whole spectrum.

The pattern of the play of color also influences value. Generally large flashes and broad patterns are more rare and valuable than small pinfire patterns.

Roman historian Pliny described the beauty of opal as the combination of the beauty of all other gems: "There is in them a softer fire than the ruby, there is the brilliant purple of the amethyst, and the sea green of the emerald - all shining together in incredible union. Some by their splendor rival the colors of the painters, others the flame of burning sulphur or of fire quickened by oil." Opal was much loved and valued highly by the Romans, who called it opalus



Opal

How to clean: Warm soapy water. Opals also require special care. Never use an ultrasonic, never use ammonia, and avoid heat and strong light which can dry out the water in opals

Hardness: 6-6 1/2

Fire Opal- is somewhat of an enigma compared to other opals. Opal is a gem valued for its play of color, the shifting light show in its depths. Body color is only a backdrop for the main attraction. But the color of fire opal is hard to ignore: hot yellows, oranges, and reds so bright they look as though they might glow in the dark.

Fire opal sometimes does have play of color but it doesn't need it to take a starring role . Fire opal, like all opal, has a high water content. As a result, it should be protected from heat and prolonged exposure to strong light, which could dry it out. All opal is relatively soft and should be in a protective mounting if set in a ring. Be especially careful with the points of marquise and pear shapes.



Fire Opal

Alexandrite- When evaluating alexandrite, pay the most attention to the color change: the more dramatic and complete the shift from red to green, without the bleeding through of brown from one color to the next, the more rare and valuable the stone. The other important value factors are the attractiveness of the two colors - the more intense the better - the clarity, and the cutting quality.

Alexandrite has a distinguished and glamorous past: it was discovered in 1830 in Czarist Russia. Since the old Russian imperial colors are red and green it was named after Czar Alexander II on the occasion of his coming of age.

How to clean: Warm soapy water. Ultrasonic and steamer usually safe

Hardness: 8.5



Alexandrite

Garnet- Generally, the more clear and vivid the color, the more valuable the garnet. If the color is in the pastel range, the clarity should be good: because in lighter tones inclusions are more noticeable. In a lighter colored gemstone, the cut is also more important: it should reflect light back evenly across the face of the stone, making it lively and brilliant. With darker more intense colors, the cut isn't as critical because the color creates its own impact.

Garnets have long been carried by travelers to protect against accidents far from home. In ancient Asia and the American Southwest, garnets were used as bullets because the glowing red color was said to increase the ferocity of a wound. There are garnets that change color in different light, translucent green garnets that look like jade, garnets with stars.

Garnets are a closely related group of gemstones that are available in every color but blue. Dark reds, orange, vivid lime green, soft bluish-pink, garnet is all these colors and then some.

How to clean: Warm soapy water. Ultrasonic usually safe

Hardness: 7 - 7 1/2

Here is the chart for GIA abbreviations and descriptions:

HUE	TONE	SATURATION
P	Purple	0 colorless or white 1 grayish or brownish
rP	reddish Purple	1 extremely light 2 slightly grayish or brownish
RP/PR	Red-Purple	2 very light 3 very slightly gray/brown
stpR	strongly purplish Red	3 light 4 moderately strong
slpR	slightly purplish Red	4 medium light 5 strong
R	Red	5 medium 6 vivid
oR	orangy Red	6 medium dark
RO/OR	Red-Orange	7 dark
rO	reddish Orange	8 very dark
O	Orange	9 extremely dark
yO	yellowish Orange	10 black
oY	orangy Yellow	
Y	Yellow	

gY	greenish Yellow
YG/GY	Yellow-Green
styG	strongly yellowish Green
slyG	slightly yellowish Green
G	Green
vslbG	very slightly bluish Green
vstbG	very strongly bluish Green
GB/BG	Green-Blue
vstgB	very strongly greenish Blue
vslgB	very slightly greenish Blue
B	Blue
vB	violetish Blue
bV	bluish Violet
V	Violet
bP	bluish Purple

TYPE I

(often inclusion free)

Beryl: aquamarine
 green
 morganite
 yellow

Chrysoberyl Garnets (all)
Smoky Quartz lolite
Kunzite

Topaz: blue
 yellow
 orange
 pink
 red

Tourmaline: green
Zircon: blue
Tanzanite Zircon:

TYPE II

(usually included)

Andalusite
Alexandrite
Ruby
Sapphire (all colors)

Peridot

Quartz: citrine
amethyst
ametrine
Spinel (all)
Tourmaline: blue, orange
yellow
multi-color
green, orange
red, yellow

TYPE III

(almost always included)

Emerald
Tourmaline: red and pink
watermelon

The same codes (I1, SI2, etc.) are used as with diamond clarity, except that the VS and VVS clarity grades are not subdivided into 1 and 2 for colored stones (as they are with diamonds). There is also no "flawless" or "internally flawless" designation for colored stones.

VVS Minute to not detectable

VS Minor

SI1 Noticeable to obvious

SI2 Obvious to prominent

I1 Prominent - moderate affect on appearance or durability

I2 Prominent - severe affect on appearance & durability

I3 Prominent - severe affect on beauty, transparency & durability

Colored Gems Size/Weight Charts (All weights are an approximation)

Colored Gems Size/Weight Charts (All weights are an approximation)

**ROUND
BRILLIANT CUT
STONES**

GEMSTONE	2mm	3mm	4mm	5mm	6mm	7mm	8mm
Alexandrite	.04	.12	.35	.63	1.30	2.15	2.90
Amethyst	.04	.10	.20	.40	.70	1.30	1.80
Aquamarine	.04	.10	.25	.45	.75	1.60	2.40
Citrine	.04	.10	.20	.40	.70	1.30	1.80
Diamond	.04	.10	.23	.47	.90	1.35	1.90
Emerald	.04	.12	.27	.48	.80	1.70	2.50
Garnet	.05	.13	.30	.60	1.00	1.60	2.50
Opal	.02	.09	.16	.34	.57	.83	1.30
Peridot	.05	.12	.26	.50	.85	1.25	2.00
Ruby	.05	.15	.34	.65	1.05	1.60	2.25
Sapphire	.05	.15	.34	.65	1.05	1.60	2.25
Topaz	.04	.11	.30	.56	1.00	1.55	2.50
Tourmaline	.04	.12	.24	.45	.75	1.55	2.00
Zircon	.06	.17	.36	.69	1.25	1.75	2.60

**OVAL CUT
STONES**

GEMSTONE	5x3	6x4	7x5	8x6	9x7	10x8	11x9	12x10	14x10	16x12	18x13
Alexandrite	.30	.61	.80	1.45	2.00	3.60	4.25	6.00	8.90	12.50	18.00
Amethyst	.23	.45	.85	1.25	1.75	2.40	3.20	4.50	6.50	11.00	14.00
Aquamarine	.20	.40	.75	1.10	1.75	2.25	3.00	4.50	6.75	10.15	10.57
Citrine	.23	.45	.85	1.25	1.75	2.40	3.25	4.20	5.20	9.00	10.75
Diamond	.25	.50	.75	1.40	2.00	3.00	4.00	5.00	8.00	11.50	16.00
Emerald	.28	.52	.85	1.00	1.60	2.25	3.75	5.00	7.50	12.00	14.50
Garnet	.25	.55	1.00	1.40	2.10	2.80	3.75	5.00	7.00	10.00	13.25
Opal	.16	.28	.47	.78	1.10	1.65	2.15	3.00	4.00	5.25	5.75
Peridot	.28	.50	.95	1.35	2.00	2.50	3.50	4.00	6.00	9.50	13.00
Ruby	.35	.60	1.00	1.55	2.20	3.15	3.80	6.00	7.25	12.00	13.00
Sapphire	.35	.60	1.00	1.55	2.20	3.15	3.80	6.00	7.25	12.00	13.00
Topaz	.27	.57	1.10	1.60	2.50	3.50	4.50	6.00	8.80	12.00	17.00
Tourmaline	.25	.50	.90	1.18	2.30	2.90	3.50	5.25	6.80	8.50	12.00
Zircon	.40	.75	1.45	2.00	2.85	4.00	5.60	7.50	8.20	13.50	14.50

**EMERALD CUT
STONES**

GEMSTONE	5x3	6x4	7x5	8x6	9x7	10x8	11x9	12x10	14x10	16x12	18x13
Alexandrite	.40	.70	1.30	2.60	3.60	4.20	6.00	8.50	9.90	14.50	22.00
Amethyst	.35	.55	1.00	1.60	2.25	2.90	4.20	5.60	7.25	13.00	17.00
Aquamarine	.25	.50	.80	1.40	2.00	3.00	4.30	4.75	7.75	13.50	17.00
Citrine	.35	.55	1.00	1.60	2.25	2.90	4.20	5.60	7.25	13.00	17.00
Diamond	.25	.50	1.00	1.50	3.00	4.00	5.00	7.8	8.80	13.00	20.00
Emerald	.30	.60	.90	1.80	2.31	3.15	4.50	5.25	5.80	14.00	17.50
Garnet	.40	.80	1.20	1.70	2.50	3.50	4.30	6.35	9.00	17.50	21.00
Peridot	.35	.60	1.00	1.70	2.25	3.80	5.25	6.25	8.80	17.00	20.00
Ruby	.55	.75	1.15	1.75	2.30	2.75	4.00	6.25	9.00	12.50	18.70
Sapphire	.55	.75	1.15	1.75	2.30	2.75	4.00	6.25	9.00	12.50	18.70
Topaz	.40	.65	1.25	2.40	3.40	4.00	5.75	8.00	9.50	14.00	21.00
Tourmaline	.30	.60	1.60	2.15	2.80	3.60	4.30	5.20	8.50	13.00	16.50
Zircon	.60	.80	1.70	2.35	3.90	4.50	6.20	7.05	8.95	14.30	19.90

PEAR CUT STONES

GEMSTONE	5x3	6x4	7x5	8x5	9x6	10x7	13x8	14x10
Alexandrite	.30	.50	.85	1.10	2.10	3.60	6.60	8.80
Amethyst	.20	.35	.65	.85	1.25	1.70	4.00	5.00
Aquamarine	.20	.35	.65	.90	1.30	1.85	4.20	5.60
Citrine	.20	.35	.65	.85	1.30	1.70	4.00	5.00
Diamond	.25	.50	.75	1.00	1.50	2.00	3.50	5.00
Emerald	.25	.45	.70	1.05	1.70	2.60	4.15	6.10
Garnet	.25	.40	1.00	1.15	1.30	1.80	3.50	5.80
Opal	.13	.22	.35	.50	.70	1.03	1.40	2.45
Peridot	.25	.45	.70	.80	1.10	1.40	3.40	4.75
Ruby	.30	.50	.75	1.00	1.85	2.50	4.75	7.90
Sapphire	.30	.50	.75	1.00	1.85	2.50	4.75	7.90
Topaz	.25	.50	1.00	1.10	2.00	3.50	6.50	8.50
Tourmaline	.35	.45	.60	.90	1.10	1.40	2.80	6.75
Zircon	.30	.70	1.00	1.30	2.60	4.00	5.25	7.50

**MARQUISE CUT
STONES**

GEMSTONE	4x2	6x3	8x4	10x5	12x6	14x7
Alexandrite	.07	.30	.70	1.25	2.10	3.50
Amethyst	.10	.20	.48	.90	1.59	2.45
Aquamarine	.08	.20	.50	.80	1.50	2.75
Citrine	.10	.20	.50	.90	1.59	2.45
Diamond	.12	.25	.50	1.00	2.00	3.00
Emerald	.09	.30	.60	1.10	1.80	2.80
Garnet	.09	.25	.60	1.20	2.00	2.85
Opal	.09	.17	.37	.59	1.00	1.25
Peridot	.10	.25	.50	1.00	2.00	2.55
Ruby	.13	.35	.75	1.15	2.20	3.00
Sapphire	.13	.35	.75	1.15	2.20	3.00
Topaz	.07	.30	.70	1.20	2.00	3.40
Tourmaline	.10	.30	.60	.85	1.55	2.20
Zircon	.13	.33	.75	1.25	1.95	3.00

This Gem Guide is brought to you by www.simplysapphires.com please visit our web site for more information and the best gems at the best prices.



This guide is freely distributed but may not be sold or altered and is copyrighted by simplysapphires.com. The text and graphics may not be used without prior consent.



