

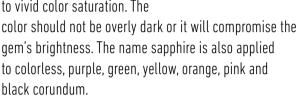


# **SAPPHIRE**

Sapphire is one of the "Big Three" gemstones found in jewelry—the other two are ruby and emerald. Sapphire is a durable gem that is most often thought of as being blue. However, the name "sapphire" also applies to any color of corundum, except red which is ruby, another corundum variety.

### SAPPHIRE -COLOR

The most highly valued blue sapphires are velvety blue to violetish blue, in medium to medium dark tones with strong to vivid color saturation. The





### SAPPHIRE - CLARITY

Sapphires often have some inclusions. Sometimes they contain intersecting silk inclusions that create a star when the stone is cut as a cabochon.



This phenomenon, called asterism, can appear as a star with 4, 6 or 12 rays. Prices can drop if inclusions threaten the stone's durability.

## SAPPHIRE - CUT

To achieve the best overall color, maintain the best proportions, and retain the most weight possible, cutters focus on factors like color zoning, pleochroism, and the

lightness or darkness of the gem.

# SAPPHIRE -CARAT WEIGHT

Sapphires of any color can range in size from a few points to hundreds of carats. Large blue sapphires are more readily available than large rubies. However, most commercial-



quality sapphires weigh less than 5.00 carats.

# TIPS AND ADVICE

#### **WORK WITH A JEWELER TO UNDERSTAND THE DIFFERENCE** THAT COLOR MAKES.

Look at different colors of sapphire side by side to understand the range of colors available. Overly dark blue or greenish-blue colors and less saturated colors like grayish blue or yellow are more affordable than vivid colors.

#### DON'T COMPROMISE ON CUT.

The quality of the cut can make a big difference in beauty and brilliance. Your sapphire should reflect light back across the entire gem in a bright and lively way. Poorly cut gems are much less marketable and sell at a discount.

### **ASK ABOUT THE TYPE OF TREATMENT A SAPPHIRE** HAS UNDERGONE.

Many sapphires on the market, both blue and fancy colors, have been treated with heat, irradiation or lattice diffusion to alter their color. Sapphires treated by lattice diffusion often have vivid color but they are less valuable than sapphires that have only been heated.

#### WHEN IN DOUBT, **GET A LAB REPORT.**

An independent report from a reputable gemological laboratory like GIA can confirm whether the sapphire you are buying is natural or synthetic. disclose any detectable treatments, and give an opinion on geographic origin, when it is possible to establish one.

# Q: HOW DO I KNOW THAT A SAPPHIRE IS PADPARADSCHA?

A: The definition of the padparadscha color has always been debated. People in the industry usually agree that this color is intensely saturated and ranges from light to medium pinkish orange to orange-pink. GIA has studied the history of the term and its modern use and indicates on sapphire identification reports when a sapphire, in the Institute's opinion, meets the criteria for being described as padparadscha.

Q: ARE SAPPHIRES FROM KASHMIR, MYANMAR (BURMA), OR SRI LANKA (CEYLON) WORTH MORE?

A: Every mine produces a wide range of quality. For gems of exceptional quality, an independent determination of origin may add to the value. For blue sapphire, Kashmir is considered to be the most desirable locality; therefore, stones coming from this region may receive the highest premium although Myanmar, Sri Lanka, and Madagascar also produce fine quality gems.

# Q: HOW DOES HEAT TREATMENT AFFECT A SAPPHIRE'S VALUE?

A: While heating is an accepted treatment for sapphire, it still needs to be disclosed. For fine quality sapphire, confirmation from an independent laboratory like GIA that there is no evidence of heat treatment adds to a sapphire's rarity and value.

# Q: WHAT ARE LATTICE DIFFUSION SAPPHIRES?

A: Lattice diffusion is a treatment process that uses heat and chemicals to diffuse an element into a gemstone to artificially change its color. Lattice diffusion treated sapphires can be any color. In some cases the added color is shallow. In others, it goes all the way through the gemstone.

# Q: HOW DOES LATTICE DIFFUSION AFFECT A SAPPHIRE'S VALUE?

A: Sapphires treated by lattice diffusion cost less than sapphires of a comparable quality that have not been treated. Diffusion treated sapphires generally also cost less than sapphires that have been heat treated without the addition of color-causing chemicals.

Q: HOW DO I CARE FOR MY SAPPHIRE? A: Sapphire is relatively hard – 9 on the Mohs scale – and has excellent toughness, which makes it an ideal choice for daily wear. Ultrasonic and steam cleaners are usually safe for cleaning untreated, heat-treated, and lattice diffusion treated sapphires. However, these cleaning methods can be risky for

gems with fractures and some black star sapphires, so warm, soapy water is recommended. Sapphires that have been fracture filled, cavity-filled, or dyed require more care, so use only a damp cloth.

As a long-standing scientific authority, GIA is not only a unique source for gem knowledge, its grading reports inspire confidence wherever they appear.

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GIA exists to connect people to the understanding of gems.





