

TURQUOISE

Azure sky, robin's egg blue: Vivid shades of turquoise define the color that's named after this gem.



ABOUT TURQUOISE



Turquoise is found in only a few places on earth: dry and barren regions where acidic, copper-rich groundwater seeps downward and reacts with minerals that contain phosphorus and aluminum.

The result of this sedimentary process is a porous, semitranslucent to opaque compound of hydrated copper and aluminum phosphate.

BIRTHSTONES & ANNIVERSARIES

Turquoise is the traditional birthstone for the month of December and the gem of the 11th 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.



WHY WE LOVE THIS GEMSTONE

SPIDERWEB

The spiderweb of veins that appear in turquoise are matrix: evidence of the surrounding rock.

LEGACY

A legacy of turquoise appreciation spans the globe, from ancient Egypt to Mesoamerica to China.

COPPER

Turquoise is colored by copper, which creates some of the most vivid blues and greens in gems.

4,000 BC

Turquoise buried in Ancient Egyptian tombs is among the world's oldest jewelry.

MEFKAT

Ancient Egyptians called turquoise "mefkat," which also means "joy" and "delight."

1519

Montezuma, thinking Cortes was Quetzalcoatl, gave him the god's favorite gem: turquoise.

FACTS

MINERAL: Turquoise

CHEMISTRY: $\text{CuAl}_6(\text{PO}_4)_4 \cdot (\text{OH})_{8.5}\text{H}_2\text{O}$

COLOR: Blue to green

REFRACTIVE INDEX: 1.610 to 1.650

SPECIFIC GRAVITY: 2.76 (+0.14, -0.36)

MOHS HARDNESS: 5 to 6

BIREFRINGENCE: Not detectable