Diamond - the birthstone for the month of April

The most sought-after gem in the world and regarded as the gem for engagements and major family events. Diamond is the birthstone for April and the anniversary gem for the 10th and 60th year of marriage.

General information

The word “diamonds” comes from the Greek word “adamas”, which means “unconquerable and indestructible.” The tradition of giving a diamond engagement ring dates back to the year 1477 when Archduke Maximilian of Austria gave a diamond ring to Mary of Burgundy.

Today, a diamond is still known as the ultimate symbol of love, making it the ideal gift for anniversaries, birthdays, and special celebrations. The largest diamond ever discovered, the Cullinan diamond weighed 3106 carats, and the largest cut diamond is the Great Star of Africa – 530 carats. Diamonds were first minded in India over 2800 years ago. However, the main sources of rough diamonds today are Russia, Canada, Botswana, South Africa, and the Democratic public of Congo (DRC).

Not only does a diamond captivate a person’s heart in just a few seconds, but the gemstone remains remarkable for the fact that diamonds were formed about 3 million years ago, deep within the earth’s crust.

Physical properties

Diamonds are made of a single element—they are nearly **99.8% carbon**. Under the immense heat and pressure far below the earth’s surface, the carbon atoms bond in a unique way that results in diamonds’ beautiful and rare crystalline structure. Diamond is the hardest substance known to man and stands at 10 on the Mohs scale of hardness.

Less than 20% of diamonds mined are considered gem-quality and can be used in jewellery and only 2% of all gem-quality diamonds are flawless and therefor are expensive. Diamonds come in a large variety of colours or mixtures of colours. It is the addition of other elements other than carbon that gives diamonds their colour. Nitrogen molecules account for the yellowish tint or colour in diamonds. Boron molecules turn diamonds blue.

Durability

Diamond has the hardness of 10 on the MOH scale of hardness. It is because of this fact diamond has been able to be polished to an extremely fine finish with very precise facet edges. The nearest gem in hardness is Ruby and Sapphire which are both from the corundum specie with a hardness of 9. The hardness scale is not linear and the difference between 9 and 10 is 140 times. In other words, diamond is 140 times harder than Corundum.

Enhancements

The colour of diamond can be enhanced by several methods such as irradiation, High Pressure High Temperature treatment or a combination of treatments. **It is important to note that any treatments must be disclosed to the buyer.**

Laboratory Grown Diamonds

Today, diamonds are manufactured in a laboratory-type of environment. There are two methods of manufacture:

HPHT (high pressure high temperature) or CVD (chemical vapour deposition).

It is important to note that full disclosure by the seller to the buyer is critical and non-disclosure is regarded as fraudulent practice.