AQUAMARINE

Aguamarine is a variety of the mineral beryl.

Name: From Latin "agua" (water) and "mare" (sea) a reference to the colour.

Appearance: Blue-green to blue, often light in tone and most often transparent.

General: Aquamarine is one of the well-known classic gemstones.

Processing: Most aquamarines are blue-green due to their colour having a blue and a yellow component. Blue being the more popular colour, aguamarine is routinely modified by a heating process removing the yellow component of the colour.

Durability: With a hardness of 7½-8 and good toughness aguamarine is durable and suitable for use in jewellery.

Special care: No

Sources: Brazil, Nigeria, Zambia, Madagascar and others.

Lore:

• The seawater colour of aquamarine has given this gemstone its name as the name "aquamarine" is derived from the Latin word for seawater.

- According to legend the aquamarine originated in the treasure chest of mermaids, and has, since ancient times, been regarded as the sailors' lucky stone. Aguamarines were believed to calm the ocean, keep sailors safe at sea and prevent seasickness.
- In addition to calming the waves, in legend aguamarine also has a soothing influence on relationships, especially on married couples. Aguamarine is said to re-awaken love in longmarried couples and signify the making of new friends. Its power to ensure a long and happy marriage makes it a good anniversary gift.
- Medieval sages believed water touched by an aquamarine could cure illnesses. It is also believed to provide insight and foresight
- Aguamarine is said to help the wearer remain young and promote love, marriage and faithfulness.
- It is given as a symbol of beauty, honesty, and loyalty.



CORUNDUM

RU

The mineral corundum is not well known, but the varieties ruby and sapphire are arguably the best known gemstones of all.



Name: Ruby: From Latin "ruber" (red). Sapphire: From Greek "sappheiros" which probably did not refer to sapphire at all but to another blue stone, lapis lazuli.



Appearance: Corundum is found in virtually all colours. The blue variety is called sapphire, the red variety is called ruby and the rest are fancy sapphires called sapphire with a colour prefix. A special case is pink sapphire, which is actually a light coloured ruby. The distinction between ruby and pink sapphire is arbitrary and varies from market to market.

General: Large, fine-quality rubies and top quality sapphires are extremely rare and valuable. But strong worldwide production and a number of different modification processes have increased availability and put ruby and sapphire within the reach of many people.

Processing: The vast majority of rubies and sapphires on the market have had their colour and/or clarity permanently enhanced by various thermal processes.

Durability: With a hardness of 9, corundum is harder than any other natural gemstone except diamond and this in combination with excellent toughness makes it very durable and ideal for all types and styles of jewellery.

Special care: No

Sources:

- Ruby: Afghanistan, Kenya, Madagascar, Sri Lanka, Tanzania and Vietnam.
- Sapphire: Australia, Thailand, Sri Lanka, Kenya, Madagascar and others.

Ruby Lore:

- The ruby is the world's most well-known and most loved red gemstone. Celebrated in ancient Sanskrit writings as the most precious of all gemstones, rubies have adorned emperors and kings and inspired countless legends and myths with their rich, fiery hues.
- The fiery crimson colour of rubies caused many civilizations to associate them with passion, love and romance. Rubies were also thought to bestow wisdom, health and luck in gambling.
- The Indians call the ruby Ratnanayaka, the lord of the gemstones. The ancient Hindus thought that the colours of rubies were due to an inextinguishable fire that burned inside the gem

that would endow its wearer with long life and even cause water to boil!

- Also the colour of blood, the stone is symbolic of courage and bravery. In the Orient the gemstone is described as "a drop of the heart's blood of Mother Farth".
- Ancient Burmese warriors were said to have implanted rubies under their skin to bring them valor in battle and make them invincible. The stone has also been used as a talisman against danger, disaster, to stop bleeding, and a number of other ailments. Its intense color was thought to come from an undying flame inside the stone – or, as some legends would have it, a piece of the planet Mars.
- Ruby lore says the gemstone protected wearers against disaster and brought love, courage, and wealth. It is often given as a token of passionate love. It was also worn as a talisman to ward against danger. Finely ground it was used as a medicine to treat blood diseases and indigestion.
- In medieval Europe the ruby was believed to guarantee health, wealth, wisdom and success in love.
- Its intense red colour makes it the gem of desire, passion, courage and emotion.

Sapphire Lore:

- Sapphires have long been a favourite among priests and kings, who considered them symbolic of wisdom and purity.
- These gemstones are prominent among the British Crown Jewels, and both Prince Charles and Prince William chose sapphire in their engagement rings.
- In ancient Greece and Rome, the blue sapphire was believed to protect from envy and harm.
- The ancient Persians believed the earth rested on a giant sapphire and its reflection made the sky blue.
- Sapphires are associated with the values of faith, truth, sincerity, wisdom, and commitment.
- A gift of sapphire is said to be a pledge of trust, honesty, purity, and loyalty.



FFI DSPAR



Feldspar is not a single mineral, but a group of related minerals. Of the feldspar gem varieties we use moonstone (white), grey moonstone, orange moonstone, amazonite and labradorite.

Name:



MS

 Amazonite: From "amazonestone" erroneously indicating a source in Amazonas.



 Moonstone: From the light effect reminiscent of moonlight shining through clouds.



 Labradorite: From the first source. Labrador, in Canada.

Appearance:

- Amazonite: Light green to greenish blue, often with grid-like white streaks and a faint sheen.
- Moonstones: Various colours, with the light effect called adularescence, which is unique to feldspars.
- Labradorite: Typically grey to nearly black, with labradorescence, another light effect unique to feldspars.

General: As a group feldspars are the most common minerals in the Farth's crust.

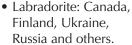
Processing: Apart from possibly waxing or oiling to improve polish on amazonite and labradorite, they and the moonstones are not modified in any way by other than cutting and polishing.

Durability: Feldspars have a hardness of 6-61/2 but poor toughness (due to cleavage in two directions) and are susceptible to damage from ultrasonic cleaning.

Special care: Wear the moonstones, amazonite and labradorite with care and do not expose them to ultrasonic cleaning.

Sources:

- Amazonite: Russia, Brazil, Madagascar, Peru, USA and others.
- Moonstones: Mainly India and Sri Lanka.





Amazonite Lore:

- Ornamental objects made of amazonite have been found that were carved in ancient Egypt.
- Legends say that amazonite is named for either the Amazon river (although amazonite has not been found near the river) or the Amazon warriors. Romantics claim that the beautiful green of the Amazon jungle is reflected in the stone that bears its name. A Brazilian legend tells that the Amazons, the legendary female warriors, gave green stones to the men who visited them as a gift of good wishes. This was believed to be Amazonite, but was probably nephrite (jade).
- Amazonite has been used for centuries as a stone of healing by shamans and healers. It is also associated with courage, hope and confidence.
- A newer belief is that the stone will activate lazy teenagers!

Moonstone Lore:

 As apparent in its name, moonstone is closely associated with the moon. According to Hindu legend, moonstone was formed from moonbeams. At one time it was believed that if you held one in your mouth during a full moon, you can see your future. In India, moonstone is still regarded as a sacred stone and is widely believed to bring good fortune.

- The ancient Romans also associated moonstone with the moon and speculated that the gem was formed from drops of moonlight. They considered the gemstones as possessing those properties traditionally associated with the moon: romance, femininity, intuition, dreams and the emotions.
- George Frederick Kunz, in his famous book The Curious Lore of Precious Stones, tells the story of a famous moonstone that allegedly displayed a white point that changed shape and size in accordance with the waxing and waning of the moon.
- Moonstone is popular in Eastern cultures as a balancing, introspective and reflective gemstone.
- Moonstone is believed to provide strength, peace, harmony and good luck.

- In many cultures, moonstone is strongly associated with love. It is a highly prized gift for lovers as it is thought to arouse tender passion. Lovers who possess a moonstone are said to be able to foretell their future life together. One legend is that two people wearing moonstone will fall passionately in love when the moon is high.
- Many cultures have believed the moonstone to be a calming, healing stone. Due to its feminine associations it has also been said to increase a woman's fertility.
- Moonstone also has a historical connection with travel. Once known as the "Traveler's Stone," it was used for protection against the perils of travel.

Labradorite Lore:

- Artifacts found in Maine, and dating to around the year 1000, show the use of Labradorite by the Algonquin tribe of that time.
- According to a Canadian Eskimo legend, the Northern Lights (Aurora Borealis) were once trapped in the rocks along the coast of Labrador, and then a wandering Eskimo warrior found them and freed most of the lights with a mighty blow of his spear. Some of the lights were still caught within the stone, however, and thus we have the beautiful stone known as labradorite.

- The Finnish often buried pieces of Labradorite in their fields as an offering to the spirits of the land. Labradorite has also been called "Black Moonstone".
- Labradorite has been claimed to be a stone of Atlantis. In people who have a genetic or past life root in Atlantis, labradorite is supposed to awaken the senses of clairvoyance, insight, creativity and knowledge.
- Labradorite, along with diamond, is also known as a winter gem. It is claimed to have been picked by the winter gods for its brilliant inclusion of all the colours and tints of the universe. Diamond and labradorite are the only stones said to include this full range of colour.
- The gem is said to It should allow you to see through illusions and determine real dreams and goals and to enable patience, focus and concentration. It is considered helpful for stressful work and exam times.





GARNFT

GR GA Garnet is not a single mineral, but a group of minerals with identical structure. The garnet minerals are mixable to the extent, that stones consisting of only one pure garnet mineral are rare.

RHL RHG RHP



We use rhodolite, technically a mixture of the minerals almandine (or almandite) and pyrope, but in the trade any

predominantly purple garnet is called rhodolite. Garnets are most commonly red and the word garnet used alone normally refers to a red garnet.

Name: Garnet: The name which is known from antiquity is derived from the Latin word "granatum" (pomegranate). Garnet crystals were seen to have a resemblance to the red seeds of this fruit.

Rhodolite: From the Greek words "rhodon" (rose) and "lithos" (stone).

Appearance: Garnets may be any colour other than blue. The stones used by PANDORA are predominantly red (garnet) to more purple (rhodolite).

Processing: Cutting and polishing only.

Durability: With a hardness of 7-7½ Mohs and fair to good toughness, garnet is relatively durable, but prone to damage due to thermal chock.

Special care: Do not expose garnets to abrupt temperature changes.

Sources: Primary sources include Brazil, India, Madagascar, Pakistan, Sri Lanka, USA, Tanzania and Zimbabwe.

- There are many myths and legends surrounding the garnet. One Biblical legend is that Noah hung this gem on the ark to light his way through the dark and stormy nights of God's wrath. Garnets have long been carried by people who are traveling, because they believe it will protect them from accidents.
- Garnet has been found in Bronze age burial sites.
 It was believed to provide protections in the afterlife.
- During the middle ages it was believed that red stones could stop bleedings. Garnets were believed to prevent or cure blood disorders.
- The garnet was believed to be a preventive of fever and dropsy, and rendered its wearer agreeable, powerful, and victorious. Legend has it that garnets protect their owners from nightmares.

- Garnets were even used as bullets because the shooters thought the red color would increase the intensity of the wound.
- In earlier times, garnets were exchanged as gifts between friends to demonstrate their affection for each other and to insure that they would meet again.
- The garnet also continues to be the protective gem of journeyers. A gift of garnet is thought to

be symbolic of love and the desire for a loved one's safe travel and speedy homecoming

Rhodolite Lore:

 Rhodolite is associated with the same beliefs as red garnet. Moreover, rhodolite is said to be the gem of faith, truth and constancy.







HFMATITE

НЕМ

Hematite (or haematite) is a mineral species.

Name: From Greek "haima" (blood) and "lithos" (stone). Hematite is red in powder form and imparts this colour to the water during the cutting process.

Appearance: Dark grey to black with metallic luster.

General: Hematite has the highest density of any commonly available gemstone and is quite heavy in larger sizes.

Processing: Cutting and polishing only.

Durability: With a hardness of 5½-6½ and good toughness, hematite is durable and suitable for use in jewellery.

Special care: No

Sources: Mainly found in England, Norway, Sweden, USA and Brazil.

Lore:

 In ancient Egypt, hematite was carved into "pillows" and was often used in death/rebirth ceremonies with their deceased. It was also utilized as an inscription stone for certain passages from the Book of the Dead. Hematite was often made into protection amulets and worn in mourning jewellery.

- The ancient Egyptians used the "bloodstone" to aid in curing abnormalities and diseases of the blood, to reduce inflammation, and to treat hysteria. Hematite itself exhibits an ability to heal itself; if scratched and then rubbed, the scratch will often disappear.
- Old Romans associated the red colour of powdered hematite with Mars, the god of war.
 The early Romans would crush the mineral and rub its red powder onto their bodies, believing this would bestow courage, strength, and a general invulnerability.
- Scientists have later discovered that hematite also is found everywhere on the planet Mars and is actually responsible for the planet's distinctive red color.
- Powdered hematite was used for war paint by the Native Indians. Ancient myth subscribes to the notion that large deposits of hematite were formed wherever battles were fought and wherever blood flowed as a result of those battles.
- In ancient Babylon, it was believed that hematite would ensure victory in lawsuits and favourable judgment from kings.



IOLITE



lolite is a variety of the mineral cordierite.

Name: From the Greek word for violet.

Appearance: Light to dark blue and violet with very strong pleochroism, which means that it shows different colours from different viewing angles. Blue stones may appear completely colourless in some directions.

General: The strong pleochroism of cordierite makes it a powerful polarizing filter, a feature that Viking navigators found useful. It enabled them to locate the sun (and thereby their position) on overcast days when navigating the North Atlantic.

Processing: Cutting and polishing only.

Durability: With a hardness of 7-7½ and fair toughness iolite is relatively durable and suitable for use in most types of jewellery.

Special care: No

Sources: India, Tanzania, Brazil, Sri Lanka and others.

- The belief, that the Vikings used thin pieces of iolite as the world's first polarizing filter in order to navigate has earned it the nickname "Viking's compass".
- According to a legend, iolite would foretell storms by changing hue.
- Iolite is also known as the gemstone of clear vision and it has been said that wearing Iolite helps quicken the wits.
- When a cool stone is touched to the eyes, or simply gazed upon, the delicate gem reputedly has a soothing effect.
- Legend calls iolite the stone of friendship.



LAPIS LAZULI



Lapis lazuli (often simply called lapis) is not a single mineral but a rock (an aggregate of several minerals) mainly consisting of lazurite, pyrite and calcite.

Name: From Latin "lapis" (stone) and "lazuli" (blue).

Appearance: Blue to violetish blue (lazurite) with metallic golden flecks (pyrite) and white veining (calcite).

General: Lapis has been mined in Afghanistan for more than 6.000 years and it was treasured by the ancient civilizations of Mesopotamia, Egypt, China, Greece and Rome.

Processing: The lapis used by PANDORA have been cut and polished only.

Durability: A hardness around 5-6 Mohs and fair toughness makes lapis quite durable, but it is susceptible to attack by acids and damage from ultrasonic cleaning. The more calcite it contains the less durable it is, since calcite is only 3 on Mohs scale and so readily attacked by some acids that it effervesces on contact.

Special care: Keep lapis lazuli away from acids and do not expose it to ultrasonic cleaning.

Sources: Afghanistan (finest quality), Russia, Chile (often much calcite) ...and others.

Lore:

 The stone has a long and varied associated with gods of truth, power and kings in different cultures.
 Legends say it offers protection against the forces of evil and ensures help from angels.



- Though there are references to lapis as a healing gem, particularly as a cure for depression or a weak heart, generally the richness and color of lapis in itself has been associated royalty and authority.
- During ancient times lapis was ground up and used for medicinal purposes as well as a cosmetic. In the Middle Ages, it was thought to keep the limbs healthy and free the soul from error, envy and fear. It was also thought of as a cure for sadness, melancholy and fever.
- Lapis lazuli was also pulverized and used as a highly valued ultramarine paint colouration from pre-Renaissance times.
- For people around the world, lapis lazuli is considered a stone of truth and friendship. The blue stone is reputed to promote peace and harmony in relationships.

NEPHRITE-JADE

Nephrite is a variety of the mineral series actinolite-tremolite. It is one of the two stones accepted as jade. The mineral jadeite is the other.

Name: Jade is derived from Spanish "piedra de iada" (stone of the loin), a reference to the medicinal use of jadeite (with which nephrite was long confused) by Native Americans. In Latin "piedra de iada" became "lapis nephriticus" from Greek "nephros" (kidney), origin of the name nephrite.

Appearance: Many colours and never transparent. The most common colour is green, which is the one used by PANDORA.

General: To prehistoric man in China, Europe and elsewhere nephrite was the ultimate material. Being the toughest of all stones – and both tougher and harder than steel - it was shaped into weapons, tools, ornaments and ritual objects as early as 25.000 years ago. This has persisted into modern times among native societies in New Zealand and North America. In China it evolved into an artistic tradition which has lasted for more than 3.000 years.

Processing: The nephrite used by PANDORA has been cut and polished only.

Durability: With a hardness of 6-6½ Mohs and exceptional toughness nephrite is extremely durable and is suitable for all types of jewellery.

Special care: No

Sources: The most important are Canada, China, New Zealand, Russia, Taiwan and USA.

- Jade is known as "the stone of the loins" due to the ancient belief that it would cure hip and kidney disorders.
- In ancient Egypt, jade was admired as the stone of love, inner peace, harmony and balance.
- Jade has been treasured for over 5000 years in China as the royal gemstone. It was used in tombs for important members of the imperial family. It was also believed that ingesting jade powder would prolong life and strengthen lungs and heart.
- Jade has traditionally been associated with the five cardinal virtues: compassion, modesty, courage, justice, and wisdom.
- Jade is still revered in China and many Chinese parents will give their children a jade bracelet to remind them of their parents' love and protection.

OPAL

POP

WOP

We use two varieties of opal: Pink opal and white opal.

Pink opal: A variety of common opal (opal without play-of-colour).

White opal: A phenomenal opal showcasing play-of-colour.

Name: From Sanskrit "upala" (stone or gemstone) but this was hardly referring to opal since opal was unknown in India.

Appearance: Pink and white with play-of-colour. Play-of-colour occurs because opal is made up of sub-microscopic spheres stacked in grid like pattern. This structure breaks up light into spectral colours.

Processing: Cutting and polishing only.

Durability: The hardness is 5 to 6½ and toughness very poor to fair. Opal fractures relatively easily. It is more or less porous, may be prone to crack due to loss of structural water and prone to damage due to thermal shock and ultrasonic cleaning.

Special care: Wear opal with care. Do not allow contact with coloured fluids. Keep it away from heat and drying environments and do not expose it to abrupt temperature changes or ultrasonic cleaning.

Sources: Pink opal: Primarily found in Peru. White opal: Primarily found in Australia.

- In gemstone lore, opal has been credited with supernatural origins and powers. An Arabic legend says that opal fell from the heavens in flashes of lightening.
- Opal was also treasured in the Middle Ages and was called ophthalmios, or "eye stone," due to a widespread belief that it was beneficial to eyesight. Blonde women wore opal necklaces to protect their hair from losing its colour.
- Opal is said to be a symbol of faithfulness and is believed to assist the wearer with finding true love. Opal is also believed to cure depressions and bring confidence to the wearer as well as the gift of prophecy.
- It is widely regarded as the luckiest and most magical of all gems because it can show all colours. Opal is also regarded as the gemstone of hope, purity and truth.



PERIDOT

PE PEA Peridot is a gemstone variety from the olivine group of minerals.

Name: Derived from either Arabic "faridad" (gemstone) or from the Greek word 'Peridona' which when translated means 'giving plenty'.

Appearance: Brownish to yellowish green.

General: Gem quality peridot has been found in meteorites. Peridot has long been called "an Evening Emerald," for under artificial light, the stone glows a brilliant green.

Processing: Cutting and polishing only.

Durability: With a hardness of 6½-7 Mohs and fair to good toughness, peridot is reasonably durable. However, it is particularly susceptible to attack by acids and prone to damage due to thermal chock.

Special care: Keep peridot away from acids and do not expose it to abrupt temperature changes.

Sources: The first was Saint John's Island (Egypt) in the Red Sea. Today the most important occurrences are in USA, China and Pakistan.

- Peridot was prized by the Egyptians as the "gem of the sun" and it was supposedly the favourite gemstone of Cleopatra.
- A Hawaiian myth claims peridot is the tears of the goddess Pele.
- According to gemstone lore, peridot will bring good luck, fortune, and peace.
- It is also said to attract love, friendship, happiness, calm anger, and protect against envious thoughts.



PINK ROCK



Name: For this particular material we have chosen to use the trade name "Pink Rock", as "pyroclastic rock" is a term used to describe a broad variety of different materials.

Appearance: Light pink to dark pink.

General: Pink Rock is a form of pyroclastic rock, which is natural stone material that stems from volcanic activity. The main minerals are Quartz and Feldspar. Obsidian and Pumice are also examples of pyroclastic rock.

Processing: Cutting and polishing only.

Durability: With a hardness of 6-7 on Moh's scale and good toughness pink rock is suitable for all types of jewellery.

Special care: No

Sources: China and others



PRFHNITE

PR



Prehnite is a mineral species.

Name: Named after Colonel von Prehn, who brought some of the first samples to Europe from Cape of Good Hope in South Africa.

Appearance: Green to yellow and only rarely completely transparent.

Processing: Cutting and polishing only.

Durability: With a hardness of 6-6½ Mohs and fair toughness prehnite is reasonably durable and suitable for use in jewellery.

Special care: No

Sources: Primary sources include USA, Canada, France, Switzerland and South Africa.

- Due to its colour, prehnite is said to look like "bottled sunshine".
- Prehnite is said to help one overcome emotional hurts and to promote peace, tranquillity, and serenity.
- Prehnite is also said to be the stone of remembered dreams, meditation and prophecy and some call it a "prediction stone".



PYRITE



Pyrite is a mineral species.

Name: From Greek "pyr" (fire) and "lithos" (stone) a reference to its ability to emit sparks when struck by steel.

Appearance: Pale brass-yellow with bright metallic luster.

General: In the jewellery trade pyrite has traditionally been sold under the name marcasite, which is actually the name of a different mineral with which pyrite was confused until the advent of modern science.

Pyrite's disappointing resemblance to gold has led to the popular name "fool's gold".

Processing: Cutting and polishing only.

Durability: With a hardness of 6-61/2 and fair toughness pyrite is reasonably durable and suitable for use in most types of jewellery.

Special care: No

Sources: Many worldwide.

- Used by the ancient Greeks in pins, earrings and amulets, pyrite was once polished by Native Americans and used as mirrors. They believed you could look into one's very soul when peering into a polished piece of Pyrite.
- Pyrite is also known as "healer's gold" and was highly regarded by healers as a gemstone with strong healing properties. The ancient Chinese also believed it would guard against attacks by crocodiles.
- Pyrite is often said to be a stone of intellect and protection which will foster intelligence and promote mental stability, logic, improve memory and enhance analytical ability.



BLACK SPINEL

Spinel is a mineral species belonging to the spinel group of minerals.

Name: Through french "spinelle" from Latin "spinella" (little thorn) probably a reference to the pointed ends of the octahedral crystals.

Appearance: Black.

Processing: Cutting and polishing only.

Durability: With a hardness of 8 Mohs and good tough-ness black spinel is suitable for all types of jewellery.

Special care: No

Sources: Spinel is primarily known from Cambodia, Sri Lanka, Tanzania and Thailand.

- Due to a similarity in looks, spinels have often been mistaken for rubies and sapphires and it's known as the greatest "master of disguise" in gemstone history.
- Spinel is found in many of the world's most famous gem collections, including the Vatican's and the Crown Jewels of Russia, Iran and England although for many years it was in the disguise as rubies. Interestingly, both the legendary 352 carat "Timur Ruby" and the 170 carat "Black Prince's Ruby", which feature in the British Imperial State Crown later proved to be red spinels!

- In 1415 at the Battle of Agincourt the English King, Henry V wore a helmet garnished with jewels including the "Black Prince's Ruby".

 During the battle, the King received a blow to the head and only survived because the blow glanced off the spinel saving his life and allowing him lead his troops to what many thought would be an impossible victory.
- Spinels have a bizarre association with sorcerers and alchemists. Spinels were used by practitioners of the "dark arts" to summon demons and also used as amulets to protect them from fire. One tale describes how spinels could be used to work against their masters. Those thought to possess supernatural powers were found guilty if they began to shake when approached with a spinel wrapped in paper! According to a legend, spinels would grant the bearer wisdom, honour and riches.
- Spinels are also associated with love and are said to help the wearer put their ego aside and become devoted to another person. Spinel also encourages passion and is said to increase the duration of one's life.
- Black spinel in particular is said to be a protective stone and helps reestablish relationships and resolve issues. It is also believed to relieve sadness.

TANZANITE

TZ

Tanzanite is a variety of the mineral zoisite.

Name: From the source country Tanzania in eastern Africa.

Appearance: Light to dark blue and violetish blue to bluish purple.

General: Tanzanite is relatively new to the gemstone scene. The first samples turned up in 1962, but it was only after a successful promotion campaign in 1968 by Tiffany & Company – at that time its main distributor – that it reached its current popularity.

Processing: Virtually all stones in the trade have been heated to bring out the blue colour. The colour is permanent under normal conditions.

Durability: Tanzanite has a hardness of 6 to7 Mohs, but only fair to poor toughness because it cleaves easily, is prone to damage due to thermal chock and is susceptible to damage from ultrasonic cleaning.

Special care: Wear tanzanite with care. Do not expose it to abrupt temperature changes or ultrasonic cleaning.

Sources: Tanzania

- According to a Masai legend, cattle herders first noticed this stone after a brush-fire caused by lightning burned large areas of the plains at the base of Mt. Kilimanjaro in Tanzania. The herders noticed that brown zoisite crystals had turned a deep blue-purple due to the heat from the fire.
- Massai tribesmen present their wives with tanzanite after childbirth. It will allegedly give lifelong health and prosperity to the child.
- Tanzanite is said to help people to deal with the stress and pressure of everyday life, allowing them to lead happier and lives.

TOPA7

ТРА ВТР

Topaz is a mineral species.

ТРР

Name: From "Topazios", the old Greek name for an island in the Red Sea thought to be a source of topaz at the time or from Sanskrit "topas" or "tapaz" (fire).



procedures.

Appearance: Colourless, yellow, orange, brown, pink to purple-red and blue. Blue topaz is almost always light to very light in colour.

General: We use blue topaz and treated topaz (paraiba blue and pink).

Processing: Virtually all blue topaz on the market has been produced from colourless topaz by irradiation and subsequent heat treatment. Treatment is undetectable. The blue colour is permanent under normal conditions and requires no special care apart from that required by the nature of topaz itself.

The treated topaz used in PANDORA jewellery have been produced by a patented process adding a coloured surface layer to the pavilion of a cut colourless topaz making an array of fashionable colours possible. The surface layer is a hard ceramic withstanding normal wear and cleaning

Durability: The hardness of topaz is 8 Mohs, but toughness is poor due to cleavage.

Special care: Wear topaz with care and do not expose it to ultrasonic cleaning.

Sources: Many worldwide.

- The Romans and the ancient Egyptians associated topaz with solar deities like Apollo and Ra. The ancient Greeks believed topaz was the 'stone of strength', and that a piece of topaz with a falcon carved on it was a talisman that would gain the favour of kings and lords.
- In India the gem was worn above the heart for intelligence, beauty and a long, healthy life.
- In the Middle Ages topaz was worn on the left hand to calm anger, lift the spirits, increase willpower and sharpen the mental faculties. Bound to the left arm it was believed to dispel enchantments, protect against evil magic, prevent sleepwalking and apparently cure hemorrhoids.
- Blue topaz is associated with courage and overcoming fears and obstacles. It is a traditional stone for writers, scholars, artists, and intellectuals; and used for aiding higher thinking. It is said to ease mental anguish and promote fidelity, friendship, gentleness, and integrity.

PINK TOURMALINE

Tourmaline is not a single mineral but a group of minerals.

Name: From Sinhalese "toramalli" or "turamali" (mixed gems). The many colours of tourmaline often caused them to be mixed up with other gemstones.

Appearance: Pink

Processing: Pink tourmaline may have been heated or irradiated to enhance, intensify or create the pink colour. Treatments duplicate natural processes and are undetectable. The result is permanent under normal conditions and no special care is required.

Durability: With a hardness of 7-7½ Mohs and fair toughness tourmaline is durable and suitable for use in jewellery.

Special care: No

Sources: Many, but the major source is Brazil.

- Ancient legend says that tourmaline is found in all colours because it traveled along a rainbow and gathered all the rainbow's colours.
- Tourmaline was believed to protect against dangers and misfortunes and when heated was capable of charming away pain, such as toothache, headache, etc.

- Considered the "stone of the muse," it was believed to stimulate the creative process of its wearer and enhance intuition and therefore helpful to artists, authors, actors and other creative people.
- A gift of tourmaline is said to be symbolic of hope and moreover will protect against all dangers.
- In Africa, tourmaline was once used as a stone
 to awaken one from "the dream of illusion."
 Ancient ceremonies in India included the use of
 the gem as a tool to bring insight and help in the
 discovery of that which is good. It would also
 serve to make known who or what was the cause
 of troubles or evil deeds.



TURQUOISE

TQ



Turquoise is a mineral species.

Name: From French "pierre tourques" (Turkish stone). At the time (thirteenth century) turquoise probably arrived in

Europe from Turkey.

Appearance: Light to medium blue to greenish blue. General: Turquoise is one of the world's most ancient gems. Egyptian royalty wore turquoise jewellery as early as 5500 BC, and Chinese artisans were carving it more than 3.000 years ago.

Processing: Turquoise is very often porous to some degree making it prone to discoloration from contact with fluids. The vast majority of turquoise on the market, including that in PANDORA jewellery, therefore has been "stabilized" by impregnation with suitable substances. The treatment is not permanent unless special precautions are taken.

Durability: With a hardness of 5 to 6 Mohs and fair to good toughness turquoise is reasonably durable. Porosity and to a certain extent fragility is alleviated by the impregnation, but the impregnation substance is susceptible to damage from ultrasonic cleaning, heat and chemicals.

Special care: Do not expose stabilized turquoise to ultrasonic cleaning and keep it away from all solvents (including various dish-washing liquids), chemicals and heat.

Sources: China, Iran, USA and others.

- The ancient Egyptian Pharaohs valued turquoise and used it for ceremonial dress and in powdered form as eyeshadow.
- Legend has it, that the Indians believed that if turquoise was affixed to a bow, the arrows shot from it would always hit their mark. It was also believed to bring happiness and good fortune to all.
- According to legend, turquoise brings health, good fortune and protection from evil.
- Turquoise is said to strengthen friendships, increases empathy, and is said to increase a person's honesty.
- A gift of turquoise represents friendship and luck and says "forget me not".



QUARTZ

Quartz is the most common single mineral in the Earth's crust and is found in more varieties than any other mineral. There are two types of gem varieties; the fully crystalline (where stones may be cut from one single crystal) and the cryptocrystalline (aggregates of crystals so small that they can only be resolved by high magnification).

Of the fully crystalline types we use rock crystal (including tourmalinated quartz), amethyst, citrine, rose quartz, smoky quartz (including cognac quartz and whisky quartz), lemon quartz, green quartz and treated quartz. Of the crypto-crystalline types we use chrysoprase, chalcedony, carnelian, pink jasper, black onyx, white agate and the

Durability: With a hardness of 7 Mohs (6½-7 for the crypto-crystalline varieties) and good toughness the quartz gemstones are durable and suitable for use in jewellery.

Special care: Generally not. Exceptions are noted under the relevant variety.

Sources: Numerous worldwide.



ROCK CRYSTAL



Name: From Greek "krystallos" (ice). Rock crystal was thought to be ice that was permanently frozen.



Appearance: Colourless and transparent. Tourmalinated quartz is rock crystal with inclusions of black tourmaline. The inclusions in tourmalinated quartz has meant that it

has been referred to as Cupid's darts or Venus' hair stone.

Processing: Cutting and polishing only.

was solidified water or ice. The connection with water led to the belief that put in the mouth it would quench thirst.

- In many parts of the Pacific it was also thought that rock quartz could magically create rain.
- The Japanese consider rock crystal to be the perfect gem and a symbol of both of purity and patience, and of the infinity of space.
- Fortunetellers used rock crystal for crystal balls to disclose the future of their clients.

Lore:

 Rock quartz has been used by shamans and healers for thousands of years. One belief is that it would cure the bites from poisonous serpents.

 In ancient times it was believed that rock quartz





AMETHYST



Name: From Greek "amethystos" (not to intoxicate). The sense of the stone preventing or alleviating drunkenness has persisted from Classical times.



Appearance: Bluish purple to reddish purple.

General: Amethyst has been the most prized member of the quartz family for centuries and has been held in high

esteem in the church, where many fine specimens are set in Episcopal rings.

Processing: Some amethysts may have been heated to lighten their colour. The treatment duplicates natural processes and is undetectable.

Durability: Some amethysts fade when exposed to strong light.

Special care: Do not wear or leave amethyst for extended periods under strong light conditions.

Lore:

 In Greek mythology Dionysus, the god of intoxication, in a fit of anger swore revenge against the next mortal he came across. When a young maiden named Amethystos crossed his path, he created fierce tigers to carry out his revenge on her. When she begged for her life to be spared, Diana tuned her into a statue of pure quartz to protect her from the claws of the tigers. When Dionysus saw the beautiful statue, he cried tears of wine in remorse and the tears turned the quartz purple.

- In ancient Greece, the gemstone was associated with the god of wine, and it was common practice to serve this beverage from amethyst goblets in the belief that this would prevent overindulgence.
- Since purple is considered a royal colour, amethyst has had historical importance as an insignia of power. Fine amethysts are featured in the British Crown Jewels and were also a favourite of Catherine the Great and Egyptian royalty.
- Amethyst was also a favourite stone in the high ranks of the Christian church and was referred to as "the stone of bishops".
- Throughout history, amethyst has been considered a calming influence, a good stone for clarity, and a protection from sorcerers and thieves.
- Amethyst is often given as a symbol of sincerity, security, and peace of mind.

CITRINE

CI CIG CIC CIY **Name:** From Latin "citrus" (lemon) a reference to the colour.

Appearance: Yellow to orange to brownish orange.

General: Citrine is by far the most widely used transparent stone in the yellow to orange colour range.

Processing: Most citrine is produced by heating amethyst. The treatment is routine and no distinction is made between treated and non-treated material in the trade. The colour is permanent under normal conditions and special care is not required.

- Citrine was revered in ancient civilisations as a gift of the sun. It was believed to bring the wearer a sense of calm, cheerfulness and objectivity.
- Citrine, like all forms of quartz, was believed to have magical powers and was worn as a talisman against evil thoughts and snake venom.
- It was also considered to have medicinal properties and was commonly used as a remedy for urinary and kidney ailments.

- According to legend, citrine promotes success, prosperity, and abundance, especially in business. The practice of placing a citrine in the cash register of a shop earned it the nickname "merchant's stone".
- Other legends claim citrine relieves stress, and promotes happiness, clarity and strength
- Citrine is given as a symbol of hope, youth, health, and fidelity





LEMON QUARTZ

rd

Name: A reference to the colour.

Appearance: Yellowish green

Processing: Probably all lemon quartz has been produced by modifying suitable quartz material with a combination of irradiation and heat.

The treatment is duplicating natural processes and is undetectable. The result is permanent under normal conditions and no special care is required.



ROSE QUARTZ



Name: A reference to the colour.

Appearance: Very light to medium pink and only rarely completely transparent.

General: Beds of rose quartz has been found area once known as Mesopotamia (today's Iraq) that date back to 7000 BC. Due to the typically light colour, small stones of good colour can be very difficult to find.

Processing: Cutting and polishing only.

Lore:

• In Greek mythology rose quartz was Eros' gift to the people of Earth. It was said that its romantic colour would encourage love and desire.

- In contrast to the passionate love associated with red gemstones, the soft pink colour is associated with more gentle and romantic feelings.
- Tradition states that people who wish to attract love should carry or wear a heart-shaped piece of rose quartz. This one of the reasons why rose quartz is known as "The marriage stone".
- Rose quartz has also been believed to have strong healing powers; amongst those powers is the power to promote forgiveness and heal relationships.
- Egyptians believed that rose quartz prevented aging.

GREEN QUARTZ



Name: A reference to the colour.

Appearance: Greyish green to

green.

Processing: The colour of green quartz may be natural, produced by heating a certain type of amethyst or created by a combination of irradiation and heat. Treatments duplicate natural processes and are undetectable. The result is permanent under normal conditions and no special care is required.

- Green quartz is said to benefit one in all areas of creativity, and imagination, as well as intellect and mental clarity.
- Lore says that it enhances prosperity and brings career success.
- Some claim that green quartz brings mental clarity, joy and a positive attitude



SMOKY QUARTZ

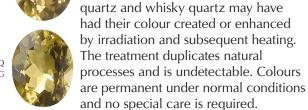


Name: A reference to the colour. The same goes for the varieties cognac quartz and whisky quartz.



Appearance: Light to dark greyish or vellowish brown.

Processing: Smoky quartz, cognac





- Smoky quartz is also known as Cairngorm
 after the Scottish Cairngorm Mountains; a once
 prevalent site for the gem. Smoky quartz is
 the National Gem of Scotland and has been
 considered a sacred stone there for a long time, a
 belief dating back to the Druids.
- Historically, smoky quartz was the material for the crystal balls used by fortune tellers; and some of the mystique of this distinctive quartz seems to persist to this day.
- The Romans considered smoky quartz to be a stone which brought a renewed joy of life after great suffering. For the Arabs, it was a stone of loyalty and friendship. The Victorians used the gemstone in their mourning jewellery.
- Smoky quartz is said to be able to guide you towards the light in even the darkest moments of life. It symbolizes that light and love can pierce through even the most impenetrable darkness.





CHRYSOPRASE

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Name: From Greek "chrysos" (gold) and "prasios" (herbal green) a reference to the colour.

Appearance: Light to medium yellowish green.

General: Chrysoprase is one of the highest valued of the crypto-crystalline quartz varieties.

Processing: Cutting and polishing only.

- Chrysoprase has been coveted since ancient times. It was used as ornamental jewellery in the forms of cameos and intaglios by the Greeks and Romans and also used as decoration and jewellery for the pharaohs of Ancient Egypt.
- The famous jewellery designer, Peter Carl Fabergé, in some of his most exquisite works, often used chrysoprase.
- Chrysoprase was a particular favourite of Frederick the Great of Prussia. He adorned his opulent palace at Potsdam, named Sans Souci, with objects and furniture made in whole or part of chrysoprase.
- This stone was the favourite gemstone or stone of Queen Anne of England and has remained popular all the way through the reign of Queen Victoria.

- Chrysoprase is said to be a victory stone.
 According to legend, the always victorious
 Alexander the Great wore a chrysoprase stone in
 his girdle. One day a snake bit the stone off the
 girdle and dropped it in the river. From that time
 forward. Alexander never won another battle.
- According to the 11th Century Byzantine manuscript of Michael Psellius, chrysoprase was believed to strengthen vision and relieve internal pain. It was also thought that the stone would lose its colour in the presence of poison.
- Chrysoprase is also thought to encourage love and tolerance and is used to promote friendship and to gain acceptance.
- In the Middle Ages it was believed that if you put a piece of chrysoprase in your mouth, you would become invisible. It is said that thieves escaped execution by using chrysoprase in this manner.
- Emanuel Swedenborg, a seventeenth-century
 Swedish theologian, scientist, philosopher, and metaphysician, credited chrysoprase with giving people a love of the truth.



TREATED QUARTZ



Appearance: Variable

Processing: This type of quartz has been artificially coloured by dying.

Durability: The result of treatment is not permanent. It is susceptible to damage from ultrasonic cleaning, solvents, chemicals and heat.

Special care: Do not expose treated quartz to ultrasonic cleaning and keep it away from all solvents (including various dish-washing liquids), chemicals and heat.

QUARTZITE

QW

Name: Origin not known.

Appearance: Quartzite is usually white to grey, though it also occurs in various shades of pink and red due to varying amounts of mineral impurities in the parent sandstone. Quartzite has a glassy lustre.

General: Quartzite is formed through the metamorphism of quartz-rich sandstones. The intense heat and pressure of metamorphism causes the quartz grains to compact and become tightly inter-grown with each other, resulting in very hard and dense quartzite. The ancient Egyptians used quartzite to make statues and for ornamental work.

General: Most varieties of quartzite contain more than 90% quartz and in some cases the quartz content exceeds 95%. The traditional way

to distinguish quartzite from sandstone is that quartzite fractures across or through the grains whereas sandstone splits between them.

Processing: The quartzite used by PANDORA has been bleached and the surface has been waxed.

Durability: Quartzite is generally durable although some stones are porous.

Special care: Keep away from contact with coloured fluids, all solvents, chemicals and heat. Do not expose quartzite to ultrasonic cleaning.

Sources: Geologically speaking quartzite occurs in countries with regional, high-pressure metamorphism such as China, Canada, Italy, Norway, Sweden and the US.

CHALCEDONY

CA CA

To a mineralogist chalcedony covers all types of crypto-crystalline quartz but in Europe the name has traditionally been applied to a certain type only. We use the name in this restricted sense.

Name: From the ancient Turkish seaport of Chalcedon (today Kadikoy).

Appearance: Pastel shades of greyish blue to blue.

Processing: Cutting and polishing only.

- Historically, chalcedony was sacred to the Goddess Diana, and connected to victory in arguments and battles, which is one reason it was used so frequently in cameos depicting military leaders.
- In the 11th century, it was said that chalcedony would cure lunatics and ensure that people wouldn't drown. Moreover, it would make the wearer beautiful, faithful, strong, and successful in all things.
- According to legend, chalcedony would also grant success in lawsuits, render the wearer healthy and provide safety in travels.



CARNELIAN (OR CORNELIAN)

CAR K

Name: Cornelian from Latin "Corneolus" an early name for "Cornus mas" the kornel cherry which grows in the same warm shades as the gem. The alternative spelling is due to some

presuming the origin of the name was Latin "caro" (meat) another reference to the colour.

Appearance: Yellowish orange to orangish red to brownish orange.

General: Carnelian was mined in India as early as the fourth century BC.

Processing: The colour of carnelian is due to inclusions of certain iron compounds (rust). The colour may be natural, produced by heating suitable iron containing material or, if iron is lacking, by adding this prior to heating. Treatments duplicate natural processes and cannot be identified. The colour is permanent under normal conditions and no special care is required.

- Carnelian is one of the oldest known gemstones.
 It was widely used in ancient Rome to make
 signet or seal rings for imprinting a seal on letters
 or important documents (hot wax does not stick
 to carnelian).
- Carnelian was a talisman of good luck as early as the ancient Babylonians and Greeks. It was also believed to bring protection and comfort.

- An old proverb states that "No man who wore a carnelian was ever found in a collapsed house or beneath a fallen wall."
- Many Muslims believe that wearing a carnelian brings peace and happiness to the owner. This belief is attributed to the fact that Mohammed wore a ring set with a carnelian seal.
- The emperor Napoleon jealously guarded a carnelian seal which he found in an Egyptian campaign and often wore as a watch charm.
- It is also said that carnelian will help timid speakers and give them the courage to speak boldly and well.





BLACK ONYX

ON O



There is some confusion regarding the name of this variety. Some prefer black agate others black chalcedony and some call it onyx. Calling it onyx however is misleading since this name

is correctly applied to material with straight parallel bands of black and white. The name chosen by PANDORA is not the most correct one, but it is the one most widely used and it is not misleading.

Name: Onyx is Greek for "fingernail". Why this name was applied is not known with any certainty but is probably because of a Greek myth.

Appearance: Black.

General: Natural black onyx is extremely rare – if it exist at all. An ancient method used by the Romans for producing black onyx consisted of burning light coloured agate with honey.

All black onyx in the trade has been treated as described below.

Processing: Grey, slightly porous agate is immersed in a hot sugar solution followed by immersion in concentrated sulphuric acid (carbonizing the sugar) and subsequently heated.

The resulting black colour is permanent under normal conditions and no special care is required.

- The myth of the origin of onyx says that the goddess Venus was resting on the banks of the Indus River. As she slept, Cupid used the point of one of his enchanted arrows to give her a manicure. The parings of her nails then fell into the waters of the sacred river. Since the nails were of heavenly origin, they sank to the river bottom and were metamorphosed into onyx.
- Public speakers of the Renaissance era used to wear black onyx. It was a common thought among people in their profession that this gemstone would enhance their level of articulation.
- There are also beliefs that it helps eliminate body organ diseases and emotional negativities. Some claim it brings about intense sexual passion.
- Onyx is known as a protective stone worn when facing adversaries in battles of conflicts of all kinds.
 It is said to ward off evil, protect against grief and instill courage.
- Indians and Persians believed that wearing onyx protected them from the evil eye, and that placing onyx on the stomach of a pregnant woman in labor would reduce the labor pain and bring on earlier delivery.
- Black onyx was also popular by Queen Victoria and used in Victorian mourning jewellery. It was also very popular in the Art Deco period.

WHITE AGATE

AGW



As was the case with onyx there is also some confusion regarding the name agate. Those who apply the name chalcedony to all crypto-crystalline varieties of quartz normally reserve

the name agate for the banded or multicoloured varieties. Those who restrict the name chalcedony to a particular variety normally use the name agate as a generic term covering all crypto-crystalline varieties. We use the word in this latter sense.

Name: According to classic writers the name should have been derived from a river named "Achates" on Sicily. This is probably the river known as Drillo today.

General: Agate was discovered with the Stone Age man in France 20,000-16,000 B.C. But scientists believe that some agates in Australia range from 2.72 to 3.50 billion years old.

Appearance: White

Processing: The colour of white agate may be natural or created by heat treatment. The result is permanent under normal conditions and no special care is required.

Lore:

 Agate was highly valued by ancient civilizations, as it was believed to render the wearer invisible.
 In Medieval times agates were tied to the horns of oxen to ensure a good harvest, but the danger was that you could lose your oxen if they became invisible before you could remove the stones!

- In Islam culture, agate is believed to protect the
 wearer from tragedies or evil. In many legends
 agate is believed to cure the stings of scorpions
 and the bites of snakes, soothe the mind, prevent
 contagion, quiet thunder and lightning, secure
 the favour of the powerful, and bring victory over
 enemies.
- The ancient Egyptians believed that agates protected the wearer from lightning, bestowed the power of speech, and quenched thirst if you put it in your mouth. Persian magicians used agate to divert storms.
- Ancient Chinese believed wearing agate jewellery would purify one's mind, energize one's chi and bring good luck and great opportunity.



BLACK/WHITE AGATE CAMEO

CAM



Name: The correct name for this material is onyx but due to the ambiguity of this name caused by frequent misuse, we have chosen the self explanatory black/white agate as an

alternative.

Appearance: Straight bands of black onyx and white agate.

General: Since Greek and Roman times this material have provided gem carvers with the ideal material for cameos and intaglios. All black/white agate used in the trade is – and always have been – treated.

Processing: See black onyx and white agate. The result of the treatment is permanent under normal conditions and no special care is required.

- Banded onyx has been used for beautiful cameos since ancient times. The close union and yet strong contrast between the layers of black and white in some varieties of onyx may suggest its connection with romance.
- Popular folklore tales often give cameos a mystic capacity to attract health and good fortune to the wearer.

- The history of the cameo started in Alexandria, Egypt hundreds of years before the birth of Christ and the cameos were made with carving traditions reaching even further back in time.
- Napoleon was very fond of cameos his coronation crown was decorated with cameos – and he even started a school to teach the art.
- Cameos reached a peak during the reign of Queen Victoria. Not only did she enjoy wearing cameos but also used them as gifts.



