

Treatment of gems – accepted or not accepted?

Some gemstones are routinely treated, and the treatment is well known and accepted in the gem and jewellery industry. However, there are some treatments that are not routinely done and must be disclosed to the buyer by the seller. The common treatments that must be disclosed by the seller include glass filling, oiling, resin filling, flux filling, dye, smoke, and sugar treatments, diffusion treatments and in some cases irradiation. Failure to do so is against the worldwide industry code of ethics and regarded as fraud. Why is this important? These treatments can significantly negative influence on the value of the gem.

Below is a chart that indicates the gem, the significant treatments possibly used and accepted by **the trade** and it follows, **therefore the consumer**.

Emerald	Glass-filling, Oil/Resin, Dye
Aquamarine	Heat (accepted)
Green beryl	None
Morganite	Heat/Irradiation (accepted)
Heliodor	None
Alexandrite	None
Iolite	None
Ruby	Glass/Flux filling, Heat (accepted)
Sapphire	Glass/Flux filling, Heat (accepted)
Andradite (demantoid)	None
Grossularite (hessonite and tsavorite)	None
Spessartite	None
Almandine	None
Pyrope	None
Peridot	None
Opal	Smoke and Sugar treatment, Dye
Amethyst	Heat/Irradiation (accepted)
Citrine	Heat (accepted)
Ametrine	Heat/Irradiation (accepted)
Smokey	Heat/Irradiation (accepted)
Rock crystal	Heat(accepted)
Prasiolite	Heat/Irradiation (accepted)
Tigers eye	Heat/Dye
Agate	Dye
Chalcedony	Dye
Jasper	Dye
Natural Spinel	Heat (accepted)
Synthetic Spinel	None
Kunzite	Irradiation (accepted)
Topaz	Heat/Irradiation (accepted)
Tourmaline	Heat (accepted)
Turquoise	Impregnation
Zircon	Colourless/ Blue assumed heated
Zoisite-Tanzanite	Assumed Heated