

Position Statement on Synthetic Diamonds for JA and JIC

Introduction

Synthetic diamonds are diamonds that have been created by man with special equipment in a laboratory. These synthetic diamonds have the same optical, chemical and physical properties as natural diamonds. For decades, man-made diamonds have been grown and used for industrial purposes. Today, very limited quantities of gem-quality synthetic diamonds are being produced and made available for use in jewelry. Gem quality synthetic diamonds, when introduced, may find a niche in the market as a new category of product available to consumers. It is our position that these new products, like all gemstone and jewelry products, must be described accurately at every level of the distribution chain with disclosure of all relevant information in accordance with Federal Trade Commission Guidelines.

The Processes

- There are currently two methods for producing synthetic diamonds: a high-pressure, high-temperature (HPHT) process, and chemical vapor deposition (CVD): Under the HPHT method, a very small diamond seed is packed in graphite, then heated and pressurized in a machine. The man-made diamonds produced under this method are primarily yellow in color, though other colors (like blue) are also possible. These yellow synthetic diamonds are currently being produced and marketed by a Florida-based company called Gemesis, with full disclosure under the name "Gemesis Cultured Diamonds".
- Chemical vapor deposition (CVD) diamonds are produced when a diamond seed grows in a vacuum chamber with a carbon cloud. The diamonds produced under this method are thin and flat and are mostly used for electronics and computers. In terms of color, most of the CVD-produced synthetic diamonds are brown, but the material can then be treated with the HPHT process to make these man-made diamonds near colorless to colorless. (Other colors that are possible include blue and black.) These lab-grown diamonds are produced by a Boston-based company called Apollo Diamonds, but as of now gem-quality Apollo product is not yet being sold or marketed for use in jewelry. The company says it plans to do so in the near future.

Detection

- Synthetic diamonds may not be detectable by a simple visual inspection, but machines are available in gem grading labs to identify both HPHT and CVD created diamonds. Trained gemologists are able to identify features in a particular diamond that would indicate a need for testing. Retail jewelers should not be expected to conclusively identify synthetic diamonds at the store level, but there are some easy observations that retailers can make to indicate if a particular diamond should be sent to a lab for testing. Synthetic diamonds, for example, often have unusual inclusions or may glow when exposed to ultraviolet light.

Jewelers who are knowledgeable about synthetics will know when to send a particular diamond to a lab for testing.

Terminology

According to the Federal Trade Commission, the word "diamond" by itself refers only to a natural diamond that has been created by nature and mined by man. The FTC requires that any diamond that is created in a lab be described with a term such as "synthetic," "laboratory-grown," "laboratory-created" or "[manufacturer's name]-created."

Disclosure

It is important that consumers know what they are buying, and good business practices therefore dictate that manufacturers, wholesalers, importers, suppliers and retailers provide full disclosure at every step of the supply chain.

Information for Retailers

Retail jewelers should know that a new type of product is entering the marketplace, and they need to sharpen their awareness and use gem labs to verify authenticity if there is any doubt about a particular diamond. Trade associations such as Jewelers of America routinely provide their members with information on developments within the trade, including synthetic diamonds and other products.

Information for Consumers

While publicity in mainstream media has increased awareness of synthetic diamonds, consumers should know that there are currently only a very small number of synthetic diamonds available. It is important for consumers to shop at a reputable jeweler, preferably a store that is a member of Jewelers of America (JA), the national trade association for retail jewelers. The employees of JA member stores have access to the latest information available within the jewelry industry, and many employ trained gemologists who can detect synthetic diamonds using their skills and equipment, or they can work with reputable gem labs to obtain certificates for their diamonds.