

Ruby Treatment Continues to Raise Nomenclature Issues



A lead glass treated ruby.
Photo courtesy of AGL.

Stabilized ruby; glass-filled ruby, composite ruby...what is the correct terminology and what will the industry ultimately accept and use for disclosure? In a follow up to the March/April GMN, we examine the issues to find a suitable solution.

by Stuart M. Robertson, GG

The article, *In Support of the Term Stabilized Ruby*, published in the March/April 2010 issue, elicited mixed response and concern over proper terminology. Gemworld is **not** opposed to the term “glass-filled ruby.” However, due to prior use in the industry, the term is incomplete in describing this ruby product unless the amount of filler is quantified. To do this would require expanding the current degrees of enhancement from *minor, moderate* and *significant* to include a designation of *extreme* reserved for “gemstones” altered to an extent that they could not exist absent the treatment.

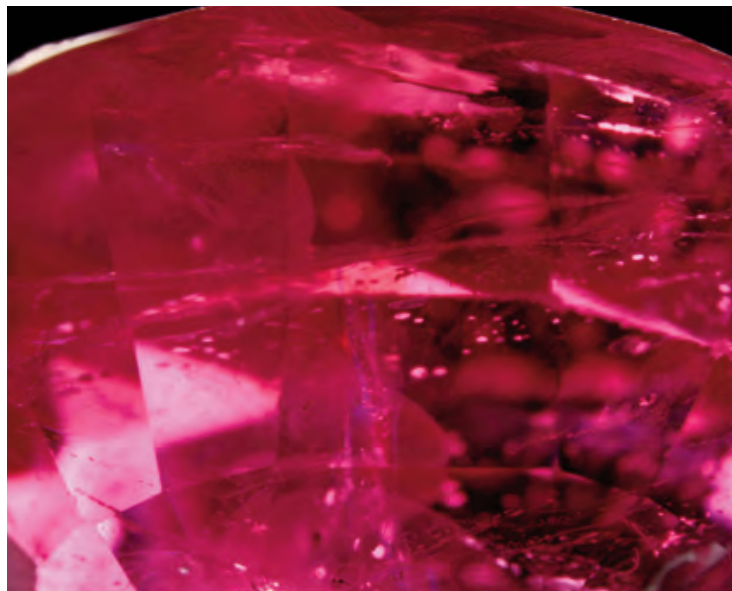
The point of the article was to address the question of how to classify this treatment. In other words, what

function does the treatment serve? Based on my examination of samples of this product from both Mozambique and Madagascar, the apparent affect of the treatment was to “stabilize” the rough for cutting and wear. However, Christopher Smith, President, American Gemological Laboratories, NY, explained the findings of his research regarding this product. His investigation of the material revealed several conditions that are not associated with typical examples of stabilized stones. Smith explained, “The only product that is even somewhat similar [to the lead glass filled ruby] is B-Jade. In that instance, acid is used to leech out material that is ultimately replaced by a polymer. However, when we talk of stabilized opal or turquoise there is a distinction between those products

and this ruby material, which I have been describing as “composite-ruby” for three years now.”

Smith further explained that treating an intact but porous material like turquoise with a polymer is done to prevent it from being discolored by oil on the skin when worn. The distinction, as he sees it is that in the case of these treated rubies they are often not intact. The glass component represents an appreciable, and in many cases a considerable, amount of the cut stone’s weight. “Glass is an integral part of these composite rubies, unlike the polymer associated with stabilized gem materials.” Regarding this material, the distinction for Smith is that the “stone” technically is not a ruby after treatment given the substantial glass component.

Yet, dealers familiar with this treated ruby product argue that this characterization is incomplete. Richard Hughes, having seen much of this rough during the past few years, states that the material he has seen is ruby, but very low quality ruby. Others that we spoke with questioned whether the cleaning out process is also attacking the ruby structure, resulting in the appearance that these stones are mostly glass.



Internal features of a glass filled ruby.
Photo courtesy of AGL.

Evolving Language

Initially I hesitated to accept the term composite ruby based on my understanding of how the gem industry uses the term “composite.” Traditionally, the term has been associated with products consisting of two or more pieces joined to form the finished “gemstone.” However, Smith stated that he had also considered prior use, but concluded that of available terminology, “composite” most closely described the product. “I am not calling these a composite stone. What I have proposed is to name the product ‘composite ruby.’ Yes, this expands the gemological definition but all the composite ruby I have seen so far consist of two integral components—glass and ruby.”

As Smith sees it, there is a relativity factor to be considered that distinguishes these from diamond; a gem

that can also be enhanced with glass. “I have heard the clarity enhanced diamond comparison before but it is a completely different matter. When a diamond is clarity enhanced, the filling of cleavages does not alter the weight. That isn’t the case with composite ruby.”

The amount of glass comprising much of this material is apparently greater than many people realize. The RI of the glass is close to that of ruby. Reportedly, it can be difficult to visually distinguish the percentage of glass versus corundum in much of this material. A more reliable gauge is to etch or remove the glass with solvents. Also, gemologists may recall reference to “glass” healed fractures associated with heating of ruby rough from Burma’s Mong Hsu deposit. This is a different matter altogether. To put it in some perspective, Smith notes that the worst healed fissure in Mong Hsu ruby contained far less glass than the best of these stones.

Consistency is Critical

Regardless of what term is ultimately associated with this material, two points must be understood. First, disclosure terminology must be acceptable to both gemological and dealer/retailer entities. Only then will it serve consumers. Terminology that can be perceived as

implying a negative attribute will not be used by sellers. Second, terminology should be consistent among trade groups and also labs. If the same product is disclosed by some as “stabilized,” others as “composite ruby,” and yet others as “treated ruby,” confusion will result and consumers may direct their spending elsewhere. Although some of the material we have examined appeared not to contain a significant amount of glass, clearly many others samples do. Smith’s case for naming this product as “composite ruby” for commercial purposes is compelling.

Meaningful disclosure cannot exist if the terminology used fails to convey the extent to which a stone has been altered. It is troubling that this material was introduced into the trade as “heated.” That is insufficient disclosure for a product containing a significant

amount of glass. For those operating within the USA, the Federal Trade Commission regulations require accurate treatment disclosure of this material, as they do other treated gems. Merely stating that the material is “heated” is not enough.

What’s in a Label?

In the March article, I consulted with research gemologists, each agreeing at that time that the historical use of “composite” has traditionally differed from the treatment associated with the majority of these “rubies.” The term “stabilized” appeared to apply more closely. However, they made those observations based on the samples on hand and that material did not appear to be as heavily treated. We agree that any material not having the properties of ruby before or after the treatment, would have been altered to a greater degree than is implied by the term *stabilized*. Smith indicates that he expects the GILC to adopt the term *composite ruby* to describe the lead-glass treated ruby product.

Consistent use of nomenclature is essential or the industry will have virtually no meaningful disclosure. If consumers are given accurate information, they can make informed choices. Consistent application of nomenclature is the key. This is the point the article endeavored to make. Unless we seek terminology that is both reliable and accurate, the international trade participants will have reason to avoid adopting it. Although still a relatively young discipline, gemology has a useable lexicon that can bring clarity to some of these issues and that should be the starting point when examining purportedly new treatments. The term *stabilized ruby* seemed to achieve that objective for the samples we had on hand. Whether the term the trade ultimately adopts is *composite*, *stabilized*, or something else is not as important as applying a repeatable standard to the nomenclature process. To do anything less invites decisions influenced by the perceived desirability of the final product and not the function of the treatment.

Will the Name Work?

Will the term “composite ruby” be widely used by the manufacturers and purveyors of this material? That point

is important because the reality is that nearly all this material will be sold without being submitted for laboratory analysis. Even with the efforts of groups like the AGL, GIA and AGA, which have been raising awareness of this product in both public and trade venues, the international gem trade’s responsibility to properly describe this material to customers falls ultimately to those who sell it.

The issue facing the international gem trade is not whether to sell this ruby product. That decision has already been made for them by their colleagues who treated the vast quantities of this material. Instead the issue is how best to classify this product so that buyers and jewelers working with these “stones” actually understand what they are, and how to care for them. As is often the case, the problem is not as much the product, as it is the way it is being sold and not accurately disclosed that poses the greatest risk to industry reputation and consumer confidence. Whether or not sales will decline due to accurate disclosure is a matter for the market to determine. It is not the policy of the *GMN* to discuss a product as being good or bad for the trade, except in instances where the product poses a health risk.

Instead, we advocate that treatments be properly disclosed and then market participants will have the ability to make informed choices about their purchasing decisions, something that clearly is not possible under the current situation.

In conclusion, we believe that although some of this material is more accurately described as *stabilized*, a greater population contains a glass constituent in excess of what would be expected in a *stabilized stone*. Considering Smith’s comments and the apparent agreement of the GILC committee to recommend the term “*composite-ruby*” for this product, the *GMN* encourages use of the term for commercial purposes. With proper education, we believe that term *composite ruby* can be acceptable to the very segment of the industry that should be encouraged to disclose—treaters and dealers. ♦



An orangy-yellow lead glass is added through a multiple step treatment process. Photo courtesy of AGL.