



G E M P A S S P O R T

Gem Passport Number
Specimen_0047

Colour
red

Date
10 August 2023

Species
Natural corundum

Item
One faceted gemstone

Variety
Ruby

Weight
2.53 ct

Origin
Burma (Myanmar)

Shape
cushion-shape

Condition
Indications of heating.
The type and extent of heat
treatment has not been
determined.

Cut
brilliant cut / step cut

Important notes and limitations on
the reverse.

Measurements
8.05 x 6.86 x 4.88 mm



Notes and Limitations

Gem Passports are a service of Gübelin Gem Lab issued based on a novel, standardized and automated testing protocol with data interpretation handled largely by an AI-driven software, called Gemtelligence™. Gem Passports apply a different, reduced standard of analysis than what is traditionally applied on Gübelin Gem Lab services. Particularly, Gem Passports are not subject to the same level of scrutiny, interpretation, detail analysis, observation and description by experienced gemmologist as standard Gemmological Reports, and do not comply with the standards specified by the Gübelin Gem Lab Seal. Gem Passports are based on a testing protocol that does not include a detailed microscopic assessment and description, which traditionally build the base of gem lab services. Hence, Gem Passports differ from Gemmological Reports with regards to the completeness, depth, breadth, details and numbers of analyses, as well as the evaluation and interpretation of the collected data. The detail of disclosure - specifically regarding authenticity and treatments - used in Gem Passports is also limited and simplified compared to Gemmological Reports. Due to this reduced level of analysis and disclosure, the findings stated in a Gem Passport might not be consistent with the findings stated in a Gemmological Report or any other Report for the same stone. Gübelin Gem Lab waives any responsibility and liability, whatsoever legal nature, for such kind of inconsistencies and deviations between different documents.

The description given in the Gem Passport is limited to a selection of identifying characteristics observed in the gemstone. The findings mentioned in this Gem Passport reflect the state of the gemstone at the time of examination. Only the unaltered original of the Gem Passport, issued by Gübelin Gem Lab, is the legally valid document. The colour photograph printed on the Passport serves merely as an illustration of the item under examination. The actual appearance of the item may differ from its photographic image. Only the main hue of the stone is stated in the Gem Passport, a possible modifying hue is not mentioned, regardless of its intensity.

Origin: On Gem Passports, the probable geographic origin of a gemstone is determined mainly based on the spectroscopic and chemical properties collected on a stone, evaluated by Gemtelligence™, a software built for the purpose of origin determination and heat treatment detection on a select range of gemstones. Gemtelligence™ is trained on data from a large number of gemstones that were studied by Gübelin Gem Lab over many decades, including data collected from reference stones of known identity and provenance, the results of continuing research undertaken by Gübelin, and gemmological knowledge published to date. Indications of origin provided by Gübelin Gem Lab are not a warranty as to the quality or value of the gemstones. They are statements of qualified opinion, and do not guarantee the provenance of particular gemstones. Rather, such statements indicate the most probable origin, based on the data collected for the gemstones tested, and based on the software trained for that purpose.

The combination of data may not, in all instances, provide the necessary basis for the determination of a single origin. When such cases arise, the Gübelin Gem Lab does not comment or provides any guarantees as to the origin of the gemstone. In addition, a determination of the origin of a gemstone reflects the level of knowledge and expertise about the respective type of gemstone at the time of the analysis.

A determination of the origin of a gemstone reflects the level of knowledge and expertise about the respective type of gemstone at the time of the analysis. Gübelin owns a comprehensive collection of authentic and fully analysed samples from all commercially relevant mines worldwide. However, mines in new areas and other countries are coming on stream, and Gübelin regularly travels to collect sample material from new sources, thoroughly studies its characteristics, and updates the software used for the automated evaluation of the analytical data. The gemstones from such new mines can possibly show gemmological characteristics which might overlap with the characteristics of stones from earlier known localities. In such case, the previously defined criteria must be reviewed to ensure the basis for the determination of the origin as described above.

Treatment/Enhancement: Historically, many coloured gemstones have been enhanced to improve their appearance. Enhancement is a term used in the trade to describe any process additional to cutting and polishing that improves the appearance or durability of gemstones. Today, a variety of traditional and advanced enhancements (also known as treatments) are routinely applied to many natural gem materials including, but not limited to, beryl, corundum, tourmaline, topaz, zircon, zoisite, etc. Heat treatment (also known as thermal enhancement) is commonly applied to gemstones such as rubies and sapphires to improve colour and/or transparency (clarity), as well as stability. Thermal enhancement of rubies and sapphires is considered stable and permanent under normal wear and handling conditions, and it is generally accepted by the international gem and jewellery trade. In the context of a Gem Passport, the presence or absence of indications of heat treatment is solely based on analytical, predominantly spectroscopic, data collected on a stone and interpreted by Gemtelligence™. In the context of a Gem Passport, **no attempts are undertaken to determine the exact type or extent of heat treatment.** Furthermore, the detection of any other treatments, such as **low-temperature heating, diffusion treatment or clarity enhancement (for ruby and sapphire), cavity filling or irradiation, are also out of scope of a Gem Passport.** Any comments made regarding the presence or absence of enhancements will therefore only reflect Gübelin Gem Lab's findings based on the restricted testing protocol and the automated evaluation of the collected data, explicitly excluding a detailed microscopic assessment and description, and excluding possible additional treatments as described above. A more complete assessment and disclosure of the exact type of treatment can be undertaken by the Gübelin Gem Lab in the scope of a Gemmological Report.

Treatment disclosure: Unlike on Gübelin Gem Lab Gemmological Reports, the wording used for disclosing treatments in Gem Passports for rubies and sapphires is restricted to the presence or absence of indications of heat treatment. The exact type and extent of treatment is not specified. **Any treatments other than standard heat treatment are neither determined nor disclosed.** For emeralds, the presence or absence of indications of clarity enhancements applies a simplified wording, without specifying the exact extent of clarity enhancement. The type of filling material or the possible presence of cavity fillings is neither determined nor disclosed.

In case of a re-examination of a gemstone, the results may differ and deviate from any previous results in any other documents of Gübelin Gem Lab, such as Gem Passports, Gemmological Reports or Lot Passports. If such cases arise, the previous document(s) is/are considered as outdated and not valid any longer. The validity of a Report can be checked through the Online Report Verification tool on our website at <https://www.gubelingemlab.com/en/gemlab/report-verification>.

The Gem Passport does not constitute a guarantee for, or appraisal of, the gemstone examined and described herein. Gübelin Gem Lab assumes no responsibility or liability for any damage or loss, or claims by third parties, which may arise from the issuance, use or misuse of this Gem Passport. It is recommended to carefully read the document "General Terms & Conditions" available on our website www.gubelingemlab.com.