

## Corundum – Ruby-the birthstone of July

Red - the colour of love, passion, and power! The name is derived from the Latin word *ruber* meaning red.

### General Information

Ruby is the birthstone for July and the anniversary stone for 15th and 40th year of marriage. Fine rubies are the most expensive of all gemstones (except for very rare diamonds). It has got all it takes for a precious stone: wonderful colour, excellent hardness, great brilliance, and rarity.



### Legend and Lore

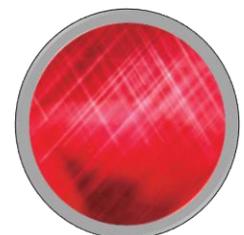
The lucky owner of a fine ruby was said to be assured of a life lived in peace. It was also said to preserve the mental and bodily health of the wearer because it removed evil thoughts. Some Indian beliefs were that he who made offerings of rubies to the gods would be reborn as a powerful emperor.

### Location of Ruby mines

Important localities for ruby are Burma, Sri-Lanka, Kenya, Madagascar, Thailand and recently Mozambique, but it is also found in Australia, Afghanistan, Pakistan, and the state of Carolina in America.



All rubies have natural imperfections – rutile needles known as ‘silk’ and feathers the most common inclusions.



## Durability

Ruby is a hard gemstone rated 9 on Mohs's Scale but tends to brittleness if dropped. It is second to diamond in hardness therefore it is a very durable and hard-wearing gemstone when used in jewellery.



## Enhancements

Virtually all rubies and sapphires sold today are heat-treated to a high temperature to maximize intensity of colour and improve clarity. The resulting stones are completely stable in colour, and this practice is accepted.

Other methods of enhancement include surface diffusion which will darken the colour of pale rubies. In this method the stone is coated with chemicals and heated to near melting temperatures. A relatively new method is diffusion with beryllium (bulk diffusion).

Many rubies are also flux healed; this involves heating with a flux which dissolves the surface of the stone. The resulting molten material re-deposits on the fracture surfaces of the stone and fills them closed.

## Synthetics & Simulants

Verneuil synthetic rubies have been made since the early 19th century. Other synthetics include the hydrothermal Chatham synthetic ruby and the Kashan flux-grown ruby. Ruby is also imitated by natural red spinel, some garnets, doublets of sapphire and synthetic ruby.