

## Corundum – No indications of heating and Indications of heating

Members of the Laboratory Manual Harmonisation Committee (LMHC) have standardised the nomenclature that they use to describe any corundum that shows no indications of heating or any corundum that shows indications of heating. See also information sheets #1 to #4.

## No indications of heating

Any corundum that shows no indications of having undergone heat treatment shall be described as,

•	Species: Variety:	Natural corundum (Natural) <sup>1</sup> ruby / (Natural) <sup>1</sup> sapphire <sup>2</sup> /
-	Comments:	(Natural) <sup>1</sup> 'padparadscha (sapphire) <sup>1</sup> '

No indications of heating (NIE) Comments:

This clause may include the presence of an insignificant amount of coloured material within a fissure, but not any amount of iron oxide and/or an orange dye in a 'padparadscha (sapphire)'.

## Indications of heating

Any corundum that shows indications of having undergone heat treatment shall be described as,

- Species: Natural corundum
  - Variety: Ruby / Sapphire<sup>2</sup> / Padparadscha (sapphire)<sup>1</sup>
- Comments:

## Indications of heating (to modify the colour or transparency of the stone) (TE)

Note A: Certain heating conditions may not modify some characteristic inclusions/internal features (e.g., intact rutile needles, unaltered zircon) while at the same time changing others (e.g., carbonates, negative crystals, apatite). If any heat-altered inclusions are observed, the comment shall be 'indications of (low temperature) heating'. This may not apply for magmatic hosted corundum.

Note B: Certain heating conditions may not modify some internal characteristics (e.g., blue zoning) while at the same time changing other features (e.g., infrared spectra). In such circumstances, if spectral data indicate heating has taken place, the comment shall be 'indications of (low temperature) heating'. This may not apply for magmatic hosted corundum.

For the definition of a 'padparadscha (sapphire)', see information sheet #4.

All rights jointly reserved by:

CISGEM S.p.A. Laboratory (Italy), GAAJ-ZENHOKYO Laboratory (Japan),

GIA Laboratory (USA), GIT-Gem Testing Laboratory (Thailand), Gübelin Gem Lab Ltd. (Switzerland),

Swiss Gemmological Institute - SSEF (Switzerland)



Wording in parentheses is optional.

<sup>&</sup>lt;sup>2</sup> 'Sapphire' for the blue variety of corundum. For other colours, 'sapphire' preceded by its colour (e.g., yellow sapphire, pink sapphire, etc.) or preceded/replaced by padparadscha.

<sup>© 2010</sup> Laboratory Manual Harmonisation Committee. This document may be freely copied and distributed so long as it is reproduced in its entirety, complete with this copyright statement. Any other reproduction, translation or abstracting is prohibited without the express written consent of the Laboratory Manual Harmonisation Committee.