

LMHC Information Sheet # 9

Description of colour-change in gemstones

- Definitions
- Report wording

Members of the Laboratory Manual Harmonisation Committee (LMHC) have standardised the nomenclature that they use to describe colour-change gemstones and alexandrite.

Definitions:

Colour-change:	main hue in daylight differs from that seen in incandescent light when observed under standardised lighting situation (see below) with a distance of approximately 30 cm from the lamp and a similar distance of approximately 30 cm from the observer.
Daylight:	for the purposes of this comparison calibrated daylight (or equivalent LED) corresponding to a range between 5500K to 6500K shall be used.
Incandescent light:	for the purposes of this comparison standard incandescent light (or equivalent LED) corresponding to a range between 2700K and 3600K shall be used.
Alexandrite:	a chromium bearing variety of chrysoberyl showing a colour-change in principle from a “cold” hue (e.g. greenish) in daylight to a “warm” hue (e.g. reddish-purplish) in incandescent light.

Report wording:

A) Any colour-change gemstone shall be described as:

Description:

Colour: **[colour]² in daylight, [colour]² in incandescent light**

Identification:

Group¹: **[group]²**

Species: **(natural)¹ [species]²**

Variety: **colour-change [Species/Variety]²**

B) Any alexandrite shall be described as:

Description:

Colour: **[colour]² in daylight, [colour]² in incandescent light**

Identification:

Species: **(natural)¹ chrysoberyl**

Variety: **alexandrite**

Note: All treatments applied to the above gemstones shall be noted.

¹ wording and text in parenthesis is optional

² text in brackets represents a place holder