

**Industry Regulations Governing** 

The Definition and Nomenclature of Gemstones and

**Ornamental Materials** 

September 2004

Japan Jewellery Association Association of Gemmological Laboratories Japan

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Description and Comments of Gemstones

# **Regulations Governing the Definition and Nomenclature of**

# **Gemstones and Ornamental Materials**

Enforced June 1, 1994 Partially Amended January 25, 1999 Amended September 1, 2004

## Chapter 1. Classification and Definition

# 1.1 Classification

Ornamental Materials shall be classified as follows according to the origin of their formation (pearls are classified based on the regulations provided separately):

- a. Natural Stones
- b. Artificial Products
  - b.1 Synthetic Stones
  - b.2 Artificial Stones
  - b.3 Imitations

However, the term "Gemstone" shall only refer to natural stones and cannot be used to describe artificial products such as synthetic stones, artificial stones and imitations.

## 1.2 Definition

#### 1.2.1 Natural Stones

"Natural Stones" are defined as precious stones (minerals, rocks and organic materials) that have been formed completely by nature without any human interference.

However, "Natural Stones" include those precious stones (formed by nature without human interference, other than by cutting and polishing) and have also been subsequently modified after their formation by various processes to improve their colour or appearance:

- a. Materials that currently have no known modification process, other than by cutting and polishing, or have very rarely been enhanced.
- b. Materials that have no indication of human interference other than by cutting or polishing.
- c. Heating
- d. Impregnation with colourless oil
- e. Impregnation with colourless foreign substances other than oil
- f. Bleaching
- g. Staining (including dyeing)
- h. Coating (including painting)
- i. Diffusion
- j. Artificial Irradiation
- k. Impregnation with coloured foreign substances
- I. Infilling
- m. Laser drilling
- n. High-temperature and high-pressure processes
- o. Others (not listed above)

#### 1.2.2 Artificial Products

Artificial products are defined as materials that are completely or partially made by humans.

#### 1) Synthetic Stones

Synthetic Stones are defined as materials that have essentially the same chemical composition, physical properties and structure as their naturally occurring inorganic counterparts, and have been completely or partially made by humans:

- a. Diamond
- b. Ruby
- c. Sapphire
- d. Alexandrite
- e. Emerald
- f. Spinel
- g. Quartz
- h. Opal
- i. Beryl
- j. Moissanite
- k. Zincite (zinkite) etc.

#### 2) Artificial Stones

Artificial Stones are defined as artificial crystalline products with no known natural gem material counterparts:

- a. YAG (yttrium aluminum garnet)
- b. GGG (gadolinium gallium garnet)
- c. Cubic Zirconia
- d. Strontium Titanate
- e. Magnesium Titanate, etc.

#### 3) Imitations

Imitations are defined as products that simulate the appearance of natural or synthetic gem materials but whose chemical composition, physical properties and structure are completely or partially different from those of their counterparts:

- a. Glass
- b. Plastics
- c. Ceramics
- d. Composite stones
- e. Reconstructed and Pressed products, etc.

# Chapter 2. Nomenclature

## 2.1 Description

Descriptions shall be in accordance with the classifications specified in Section 1.1.

## 2.1.1 Natural Stones

Names of Minerals (Group/Species) – See attached table. The term "natural" shall be prefixed to the names of minerals.

Names of Gemstones (Variety) - See attached table.

The term "natural" shall not be prefixed to the names of gemstones. Colour and Variety names may be affixed.

Comments - See attached table.

The type of process and modification applied shall be described. However, if confirmation of the process applied is undeterminable, comments to that effect shall be clearly stated.

#### 2.1.2 Synthetic Stones

The Synthetic Stones described in Section 1.2.2(1) shall always be described with the prefix "Synthetic". Under no circumstances should any other term be used that could misrepresent the stone as natural.

#### 2.1.3 Artificial Stones

The Artificial Stones described in Section1.2.2(2) shall always be described with the prefix "Artificial".

2.1.4 Imitations

Among the Imitations described in Section 1.2.2(3), stones other than composite stones shall always be described as an "Imitation". When the material can be identified, the name of the material may be appended. Composite stones shall be described as a "doublet" or a "triplet".

## 2.2 Regulations of Names

## 2.2.1 Description of Coloured Stones

Prefixing a colour to the name of natural gemstones, synthetic stones and artificial stones is optional.

## 2.2.2 Description of Unusual Optical Effects

Natural gemstones, synthetic stones and artificial stones, which possess the following unusual optical effects, shall be described by their stone name in conjunction with the name of the effect:

- a. Asterism (star effect): A stone displaying asterism shall be described with a prefix "star" to the name of the stone.
- b. Chatoyancy (cat's eye effect): A stone displaying chatoyancy shall be described with a suffix "cats eye" to the name of the stone.
- c. Colour change: Only the variety of chrysoberyl with a colour change effect shall be called "alexandrite." Any other natural, synthetic or artificial stone that exhibits a change of colour shall be described with a suffix "colour change type" to the name of the stone.

d. Aventurescence (aventurine effect): Varieties of stones that display aventurescence may be described with a prefix "aventurine" to the name of the stone.

# 2.2.3 Misuse of Names

Each stone must be described with its correct name as provided in the following table. It is inadmissible to misname a stone by describing it in conjunction with the name of a stone whose nature is totally different, or to describe a stone with the name commercially registered by a manufacturer.

# **Description and Comments of Gemstones**

(The following table shows the commonly applied descriptions of gemstones)

Enforced June 1, 1994 Partially amended September 1, 1996 Partially amended April 10, 1998 Partially amended November 17, 1998 Partially amended January 25, 1999 Amended September 1, 2004

Names of Minerals (Group / Species)	Colour, Clarity etc	Names of Gemstones (Variety)	Processes and Modifications	Comments	Remarks
Natural Actinolite - Tremolite	<ul> <li>◊Green</li> <li>◊Black</li> <li>◊Brown</li> <li>◊Gray</li> </ul>	Nephrite Colours other than green: DDNephrite (Prefixing a colour is optional)			
	◊Green	Nephrite Cat's Eye(or Actinolite Cat's Eye)			
Natural Andalusite		Andalusite		Currently has no known modification process, other than by cutting and polishing	
Natural Apatite	<ul> <li>◊Blue</li> <li>◊Green</li> <li>◊Yellow</li> </ul>	Apatite		Currently has no known modification process, other than by cutting and polishing	
Natural Aragonite		Aragonite			
Natural	◊Green	Malachite			
Azurite/Malachite	Opark Blue	Azurite			
		Azure-Malachite			
Natural Beryl	¢Cr Green	Emerald (Cat's Eye and Trapiche Emerald)		No Traces of impregnation with colourless foreign substance	
			Impregnation	Traces of impregnation with colourless foreign substance to improve clarity	
and realise and per waters to be provided by particular to the period of the			Impregnation with coloured foreign substances	Treated by impregnation with coloured dye	4
			Coating	Treated by coating with coloured substance	
	¢Blue	Aquamarine (including Cat's Eye)	Heating	Commonly heated to improve its colour *	* See reverse side for "Description of Gem Identification Report"
	00ark Blue	Blue Beryl	Irradiation	Treated by artificial irradiation to change its colour	

Names of Minerals (Group / Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural Beryl	◊Pink	Morganite			
	Survey and consider	Pezzotaite			
		(including Cat's Eye)	Impregnation	Traces of impregnation with colourless foreign substance to improve its clarity	
	◊Yellow	Yellow Beryl			
	◊Golden	Golden Beryl			
	<b>◊Yellow</b> Green	Heliodor			
	◊Green	Green Beryl			
	◊Colourless	Goshenite			
	♦Red	Red Bervl			
			Impregnation	Traces of impregnation with colourless foreign substance to improve its clarity	The following may be stated in Remarks: Also known as Bixbite
		Star Beryl		Currently has no known modification process, other than by cutting and polishing	
		Beryl Cat's Eye			
Natural Calcite		Calcite		Currently has no known modification process, other than by cutting and polishing	-
Natural	◊Cr Green	Alexandrite		Currently has no	
Chrysoberyl	(Colour Change)	(including Cat's Eye)		known modification process, other than by cutting and polishing	
	<ul><li>◊Yellow</li><li>◊Green</li><li>◊Brown</li></ul>	Chrysoberyl Cat's Eye		Currently has no known modification process, other than by	
		Chrysoberyl (Prefixing a colour is optional)		Currently has no known modification process, other than by cutting and polishing	
Natural Chrysocolla		Chrysocolla			
Natural Cordierite	00ark Blue	lolite		Currently has no known modification process, other than by cutting and polishing	
Natural Corundum	ovaried colours	Ruby or □□□Sapphire (Prefixing a colour is optional)	Unheated	No indications of heating	For orange-pink varieties within the limits of colour specified by AGL/JJA the following may be stated in Remarks: Commonly known as Padparadscha
			Heating	Heated to improve its colour	For orange-pink varieties within the limits of colour specified by AGL/JJA the following may be stated in Remarks: Commonly known as Padnaradscha

Names of Minerals (Group / Species)	Colour and Clarity	Names of Gemstones (Varieties)	And Modifications	Comments	Remarks
Natural Corundum	<ul> <li>◊Varied colours</li> <li>◊Blue - Purple</li> </ul>	Ruby or □□ Sapphire (Prefixing a colour is optional)	Heating	Treated by heating, colour artificially induced by diffusion of chemical elements from an external source	The colour has not permeated to the centre of the stone The colour is confined to a thin layer close to the surface of the ston
	¢Blue	Star Sapphire		Treated by heating, asterism artificially caused by diffusion of chemical elements from an external source	
	◊Varied colours	Ruby or □□□Sapphire (Prefixing a colour is	Residue in fractures	This statement shall follow the comment on heating – Indications of residue in fractures	
	ter oto ot	optional)	Infilling in cavities	This statement shall follow the comment on heating – Indications of Infilling in cavities	
			Impregnation with oil	Traces of impregnation with oil to improve its clarity	
			Impregnation with lead glass, etc.	Treated by impregnation with transparent substance to improve its clarity	
		Star Ruby or □□□Star Sapphire (Prefixing a colour is optional)			
Natural Gypsum		Alabaster			
Natural Diamond	◊Varied colours	Diamond (Colour/Variety names may be affixed)	High-pressure high-temperatu re (HPHT) process	This diamond has been processed by high pressure/temperature (HPHT) to change its colour	
		*		Whether the colour of this diamond is of natural origin or the result of high pressure/temperature (HPHT) cannot be determined *	* Requires further advanced analysis to determine its colour origin
		÷	Coating and	Colour origin is currently undeterminable This diamond has been	A.
	Ser.		painting	treated by coloured coating	
			Irradiation	This diamond has been artificially irradiated to change its colour	
1				Colour origin is currently undeterminable	900 A. S. R.S.

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Names of Minerals (Group / Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural Diamond	◊Varied colours	Diamond (Prefixing a colour is optional)	Impregnation	This diamond has been treated by impregnation with transparent	
			Laser drilling Laser drilling applied to im	substance to	
			Laser drilling	Laser drilling is applied to improve its clarity	
				The internal laser process is applied to improve its clarity	
	<b>◊Black</b>	(Black Diamond is acceptable)	Heating	This diamond has been heated to change its colour	
Natural Danburite		Danburite		Currently has no known modification process, other than by cutting and polishing	
Natural Feldspar	◊White ◊Colourless	Moonstone		Currently has no known modification	
	◊Green ◊Pink	□□□Moonstone (Prefixing a colour is optional)		by cutting and polishing	
		Orthoclase		Currently has no known modification process, other than by cutting and	
		Andesine		Currently has no known modification process, other than by cutting and polishing	
	<ul><li>◊Brown</li><li>◊Colouriess</li></ul>	Sanidine		Currently has no known modification process, other than by cutting and polishing	
	◊Green	Amazonite			
		Laboradorite		Currently has no known modification process, other than by cutting and polishing	
		Bytownite		Currently has no known modification process, other than by cutting and polishing	
	◊Orange - Red	Sunstone		Currently has no known modification process, other than by cutting and polishing	
Natural Fluorite	◊Blue - Green	□□□Fluorite (Prefixing a colour is optional)	Irradiation	Colour origin is currently	
		-		undeterminable	
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Names of Minerals (Group/Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural Garnet	0Red	Almandine Garnet		Currently has no known modification process, other than by cutting and polishing	
		Rhodolite Garnet		Currently has no known modification process, other than by cutting and polishing	
	◊Red – Colourless	Pyrope Garnet		Currently has no known modification process, other than by cutting and polishing	
	◊Orange – Orange Red	Spessartine Garnet		Currently has no known modification process, other than by cutting and polishing	
	<ul> <li>◊Green</li> <li>◊Yellow</li> <li>◊Golden</li> <li>◊Colourless</li> </ul>	□□□Grossular Garnet (Prefixing a colour is optional)		Currently has no known modification process, other than by cutting and polishing	For green alone, the following may be stated in Remarks: Commonly known as Tsavorite
	◊Yellow – Orange	Hessonite Garnet		Currently has no known modification process, other than by cutting and polishing	
	◆Translucent ◊Green ◊Pink	Hydrogrossular Garnet (Prefixing a colour is optional)		Currently has no known modification process, other than by cutting and polishing	
	◊Brown	Andradite Garnet		Currently has no known modification process, other than by cutting and polishing	
	◊Green	Demantoid Garnet		Currently has no known modification process, other than by cutting and polishing	
	<ul> <li>Mixture of two varieties</li> <li>Mixture of more than two varieties</li> </ul>	Garnet Garnet		Currently has no known modification process, other than by cutting and polishing	
	(Colour Change)	Garnet (Colour Change Type)		Currently has no known modification process, other than by cutting and polishing	
	E-41	Star Garnet		Currently has no known modification process, other than by cutting and polishing	
		Garnet Cat's Eye		Currently has no known modification process, other than by cutting and polishing	
Natural Hauyne	◊Blue	Hauynite		Currently has no known modification process, other than by cutting and polishing	

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Names of Minerals (Group/Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural Howlite	◊White	Howlite			
	◊Varied colours		Staining	Treated by staining with coloured dye	
Natural Lazurite	◊Dark Blue	Lapis lazuli			
Natural Magnesite	◊White	Magnesite			
	Varied colours		Staining	Treated by staining	
			and the Party	with coloured dye	1
Natural Olivine	◊Yellow Green	Peridot		Currently has no	
				known modification	
				process, other than	
				by cutting and	_
Natural Onal	ABlack	Black Opal		Cursently bee po	
with play of colours	VDIACK	Diack Opai		known modification	
with play of colours				process other than	
				by cutting and	
				polishing	
			Heating	Treated by heating	
			11.10 ETEL (10.10	to blacken its colour	
			Immersion in	Treated by	
			sugar solution	carbonization to	
			Ū	blacken its colour	
			Impregnation	Treated by	
			of colouring	impregnation with	
			material	coloured foreign	
				substance to	
				blacken its colour	
		(Black) Opal	Infilling	Treated by Infilling	
				to improve its	
	AC	Oral		appearance	
	oGray	Opai		Currently has no	
				known modification	
				by cutting and	
				polishing	
	oWhite	White Opal		Currently has no	
				known modification	
				process, other than	
				by cutting and	
				polishing	
	◊Red - Orange	Fire Opal		Currently has no	
				known modification	
				process, other than	
				by cutting and	
	ACaleuriana	Mater Oral		polisning	
	voolouriess	vvater Opal		known modification	
		7		process other than	
				by cutting and	
				polishing	
		Boulder Opal		Currently has no	
				known modification	
				process, other than	
				by cutting and	
				polishing	7
		Iron Opal		Currently has no	
			C.	known modification	
				process, other than	
				by cutting and	
		Opel (Mith Linch		Currently has an	
		Dpai (With Host		currently has no	
		RUCK)		process other then	
				by cutting and	
				sy outling and	

Names of Minerals (Group/Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural Opal with play of colours		Opal	Staining	Host Rock has been treated by staining with coloured dye	
Natural Opal without play of colours	◊Red - Orange	Fire Opal		Currently has no known modification process, other than by cutting and polishing	
	<ul> <li>◊Yellow</li> <li>◊Green</li> <li>◊Pink</li> <li>◊Blue</li> </ul>	□□□Opal (Prefixing a colour is optional)		Currently has no known modification process, other than by cutting and polishing	
Natural Jadeite	◊Green	Jadeite, or Jadeite (Jade) is also acceptable		No traces of waxes	-
	◊Varied colours	Jadeite, or Jadeite (Jade) is	Waxing	Commonly waxed to improve its lustre	
		also acceptable. Colours other than green: □□□Jadeite (Prefixing a	Impregnation with resin	Treated by impregnation with colourless resin to change its appearance	
		colour is optional) and Black Chloromelanite is also acceptable	Impregnation with coloured resin	Treated by impregnation with coloured resin to change its appearance	
	♦With other ingredients			This statement shall follow the above comment: Traces of other ingredients	
	♦With other minerals			This statement shall follow the above comment: Traces of other	
Natural Quartz	≎Colourless	Rock Crystal		Currently has no known modification process, other than by cutting and polishing	
	◊Varied colours	Quartz	Staining	Treated by staining with coloured dye	
	◊Purple	Amethyst		Currently has no known modification process, other than by cutting and polishing	
	◊Yellow	Citrine	Heating	Commonly heated to improve its colour	* See reverse side for "Description of Gem Identification Report"
		Quartz	Irradiation	Commonly treated by artificial irradiation to change its colour	* See reverse side for "Description of Gem Identification Report"
	◊Yellow/Violet	Parti-Coloured Quartz, or Bicolour Quartz		Currently has no known modification process, other than by cutting and polishing	The following may be stated in Remarks: Commonly known as Ametrine
	◊Yellow/Brown	Parti-Coloured Quartz, or Bicolour Quartz	Irradiation	Commonly treated by artificial irradiation to change its colour	* See reverse side for "Description of Gem Identification Report"

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Names of Minerals (Group/Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural Quartz	◊Green	Greened Amethyst	Heating	Heated to improve its colour	
	≬Brown	Smoky Quartz	Irradiation	Commonly treated by artificial irradiation to change its colour	* See reverse side for "Description of Gem Identification Report"
	◊Black	Cairngorm	Irradiation	Commonly treated by artificial irradiation to change its colour	* See reverse side for "Description of Gem Identification Report"
	≬Pink	Rose Quartz		Currently has no known modification process, other than by cutting and polishing	
	ôPink ôYellow	Star Quartz		Currently has no known modification process, other than by cutting and polishing	
	<ul><li>◊Brown</li><li>◊Black</li><li>◊Yellow</li></ul>	Star Quartz	Irradiation	Commonly treated by artificial irradiation to change its colour	* See reverse side for "Description of Gem Identification Report"
		Quartz Cat's Eye		Currently has no known modification process, other than by cutting and polishing	
	<ul> <li>◊Brown</li> <li>◊Black</li> <li>◊Yellow</li> </ul>	Quartz Cat's Eye	Irradiation	Commonly treated by artificial irradiation to change its colour	* See reverse side for "Description of Gem Identification Report"
Natural Quartz	◊White	White Chalcedony			
(Polycrystalline)	◊Ni Green	Chrysoprase			
	◊Green	Mtrolite			
		Green Chalcedony	Staining	Treated by staining with coloured dye	
	◊Blue	Blue Chalcedony			
			Staining	Treated by staining with coloured dye	-
	◊Yellow	Yellow Chalcedony	Staining	Treated by staining with coloured dye	
	◊Red	Carnelian	Heating/Stainin g	Treated by heating and/or staining with coloured dye to change its colour	
	◊Brown	Sard			10 C
-	<b>◊Black</b>	Black Chalcedony	Staining	Treated by staining with coloured dye	
	◊Green	Green Agate	Staining	Treated by staining with coloured dye	

	Names of Minerals (Group / Species)	Colour and Clarity	Gemstones (Varieties)	and Modifications	Comments	Remarks
	Natural Quartz (Polycrystalline)	◊Blue	Blue Agate	Staining	Treated by staining with coloured dye	
		♦Blue	Blue Lace Agate			
		\$Red	Sardonyx	Heating/Staining	Treated by heating and/or staining with coloured dye to change its colour	
		Unit politik	Red Moss Agate			
		♦Black	Black Onyx	Staining	Treated by staining with coloured dye	
			Moss Agate			
			DDDJasper (Prefixing a colour is optional)			
			Bloodstone	0.11		
		◊Varied colours	Jasper	Staining	Treated by staining with coloured dye	
		◊Golden Yellow	Tiger's Eye			
)		≎Red		Heating	Heated to improve its colour	
		◊Varied colours		Staining	Treated by staining with coloured dye	
		◊Yellow	6	Decolourization	Treated by decolourization to lighten its colour	
		◊Golden Yellow/Dark Blue	Zebra Tiger's Eye			
		◊Dark Blue	Hawk's Eye			
		◊Greenish	Wolf's Eye			
		Yellow				
		◊Green ◊Blue	□□□Aventurine Quartz (Prefixing a colour is optional)			
		◊Green	Green Quartz			
		◊White	Quartzite			
1		◊Varied colours		Staining	Treated by staining with coloured dye	
	Natural Rhodochrosite	◆Transparent	Rhodochrosite		Currently has no known modification process, other than by cutting and polishing	

Names of Minerals (Group / Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural Rhodochrosite	♦Translucent	Rhodochrosite			
Natural Rhodonite	ARed - Pink	Rhodonite			
Natural Sementine	VICEU - FIIIK	Serpentine			
Natural Sodalite	≎Dark Biue	Sodalite		Currently has no known modification process, other than by cutting and polishing	
Natural Scapolite		Scapolite		Currently has no known modification process, other than by cutting and polishing	
Natural Spinel	<ul> <li>◇Red</li> <li>◇Pink</li> <li>◇Orange</li> <li>◇Blue</li> <li>◇Purple</li> <li>◇Violet</li> </ul>	□□□Spinel (Prefixing a colour is optional)		Currently has no known modification process, other than by cutting and polishing	
	(Colour Change)	Spinel (Colour Change Type)		Currently has no known modification process, other than by cutting and polishing	
		Star Spinel		Currently has no known modification process, other than by cutting and polishing	
Natural Sphene		Sphene		Currently has no known modification process, other than by cutting and polishing	
Natural Spodumene	<b>⊘</b> Pink	Kunzite			
			Irradiation	Colour origin is currently undeterminable	
	◊Colourless	000		Currently has no	
	ôYellow ôFe Green	Spodumene (Prefixing a colour is optional)		known modification process, other than by cutting and polishing	
	¢Cr Green	Hiddenite		Currently has no known modification process, other than by cutting and polishing	
	◊Green	Spodumene	Irradiation	Treated by artificial irradiation to change its color	
Natural Topaz	<ul><li>◊Yellow</li><li>◊Brown</li><li>◊White</li></ul>	□□□Topaz (Prefixing a colour is optional)		Currently has no known modification process, other than by cutting and polishing	Only for OH type the following may be stated in Remarks: Commonly known as Imperial Topaz
	≬Pink		Heating	Commonly heated to improve its colour	* See reverse side for "Description of Gem Identification Report"

	Names of Minerals (Group / Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes And Modifications	Comments	Remarks
	Natural Topaz	¢Blue	(Prefixing a colour is optional)	Irradiation	Treated by artificial irradiation to change its colour	
		◊Green		Irradiation	Treated by artificial irradiation to change its colour	
				Chemical treatment	Chemically treated to change its colour	
		oMore than two colours	Parti-coloured Topaz		Currently has no known modification process, other than by cutting and polishing	
00	Natural Tourmaline	oRed oPink	Tourmaline (Prefixing a colour is optional) Including Cat's Eye	Irradiation	Commonly treated by artificial irradiation to change its colour *	* See reverse side for "Description of Gem Identification Report" Within the limits of colour specified by AGL/JJA, the following may be stated in Remarks: Commonly known as Rubellite
		<ul> <li>◊Blue</li> <li>◊Green</li> <li>◊Yellow</li> <li>◊Green Blue</li> <li>(Neon Colour)</li> </ul>		Heating	Commonly heated to improve its colour *	* See reverse side for "Description of Gem Identification Report" For blue colour alone, and within the limits of colour specified by AGL/JJA, the following may be stated in Remarks: Commonly known as Indigolite The term "Paraiba" may only be used
		♦Chrome (including			Currently has no known modification	in an Analysis Report
		Vanadian) ◊Yellow ◊Golden ◊Brown ◊Purple ◊Violet ◊Colourless ◊Black			process, other than by cutting and polishing	
		<ul><li>◊More than two colours</li><li>◊Watermelon</li></ul>	Parti-coloured Tourmaline Watermelon Tourmaline			

Names of Minerals (Group/Species)	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural Turquoise	◊Green	Turquoise	Waxing	Commonly waxed to improve its lustre	
			Impregnation with colourless substance	Treated by impregnation with colourless foreign substance to improve its lustre and durability	
			Impregnation with coloured substance	Treated by impregnation with coloured foreign substance to improve its lustre and durability	
			Chemical treatment	Chemically treated to improve its appearance	1
Natural Zircon	<ul> <li>◊Colourless</li> <li>◊Blue</li> <li>◊Golden</li> </ul>	Zircon (including Cat's Eye)	Heating	Commonly heated to change its colour *	* See reverse side for "Description of Gem Identification Report"
	öBrown öRed öYellow öGreen	□□□Zircon (Prefixing a colour is optional) Including Cat's Eye		Currently has no known modification process, other than by cutting and polishing	
Natural Zoisite	0Blue	Zoisite (Prefixing a colour is optional)	Heating	Commonly heated to improve its colour *	* See reverse side for "Description of Gem Identification Report" The following may be stated in Remarks: Commonly known as Tanzanite
	<ul> <li>◊Yellow</li> <li>◊Green</li> <li>◊Brown</li> <li>◊Pink</li> <li>◊Purple</li> </ul>	□□□Zoisite (Prefixing a colour is optional)	-		
		Ruby in Zoisite			

Materials	Colour and Clarity	Names of Gemstones (Varieties)	Processes and Modifications	Comments	Remarks
Natural		Ammonite		Contraction of the second	
Ammonite		Ammolite	Coating		Coating has been applied
	Card and a second s		Protection		Transparent covering has been applied
			Assembly		Assembled with an under-layer of a different material
Natural Ivory		Ivory			and the second s
indianal inory		Mammoth Ivory			11 Mar 1997
	Other animals	lvory			
Natural Coral	TO LIFE D	Coral	Infilling		Indications of Infilling
Hatarar obtai					Indications of Infilling with the same material
			Staining	Treated by staining with coloured dye	
			Coating (including painting)	Treated by coating to improve its lustre	
	♦Other than Precious Coral		and the second second		This is a different variety from Precious Coral
	≎Golden		Decolourization	Treated by decolourization to lighten its colour	This is a different variety from Precious Coral
Natural Jet		Jet			Jet is the name used to broadly describe coal varieties including lignite and bituminous coal
Natural Amber		Amber (if an insect trapped in amber is visible, "Amber With Insect" is also acceptable)	Heating	Heated to improve its colour	
Natural Copal		Copal			
Natural Tortoise Shell		Tortoise Shell			Assembled by a process unique to Tortoise Shell
			Assembly	Assembled with an under-layer of a different material	
Natural Shell		Shell		and the second se	

## Supplementary Provisions

- 1. These Rules are effective from September 1, 2004.
- Gem Identification Reports issued before the enforcement of the present Rules shall, in consultation
  with the issuing laboratory, be changed as promptly as possible to those prepared in accordance with
  the present Rules.
- 3. These Rules do not only govern gem identification reports. Members of the Japan Jewellery Association are expected to comply with these Rules in performing commercial transactions, including preparing letters of guarantee and invoices.
- 4. Inability to provide clear descriptions of individual items in the following examples may arise. In these cases the comments and remarks described in the following table shall apply: \* Circumstances where numerous small melee sized stones, mountings and other conditions restrict

Names of Minerals (Group/Species)	Names of Gemstones (Variety)	Conditions	Comments	Remarks
Natural Beryl	Emerald Pezzottaite Red Beryl	Magnification examinations alone did not detect the presence of transparent substances. This item has not been subjected in its unmounted condition to a higher level of analyses required for such determination using a FT-IR spectrometer, Raman spectrometer- and/or other instruments	Commonly impregnated with colourless foreign substance to improve its clarity *	* The detection of transparent foreign substances requires a higher level of analysis
Natural Corundum	Ruby or □□□Sapphire (Colour/Variety names may be affixed)	Magnification examinations alone are unable to clarify whether the stone has been heated. However it has been determined that the colour is not artificially induced by diffusion of chemical elements from an external source.	Commonly heated to improve its colour *	* Clarification of heating requires a higher level of analysis
		Magnification examinations alone are unable to clarify whether the stone has been heated. In addition it is undetermined whether the colour has been artificially induced by diffusion of chemical elements from an external source (eg. Especially the yellow to orange varieties without any inclusions)	Commonly heated to improve its colour. The detection of artificially induced diffusion of chemical elements from an external source requires a higher level of analysis to which this stone has not been subjected	
		Magnification examinations have clarified that the stone has been heated. However it cannot be determined whether the colour has been artificially induced by diffusion of chemical	Heated to improve its colour. The detection of artificially induced diffusion of chemical elements from an external source requires a higher level of analysis to which this	

stone has not been

subjected

elements from an external

source

5. If gemstones fall under any of the following modification categories, the appropriate comments shall be described (or along with other comments) in the Comments column. However, if those stones have similar characteristics to the following modification categories but the comments on them have already been given in the tables under "Description and Comments for Gemstones", those comments shall be preferentially applied.

Processes and Modifications	Comments	
Stones which are semi translucent or opaque and which	Impregnated with a transparent substance to	
have been impregnated with a transparent substance	improve its lustre and durability	
Transparent stones which have been impregnated with a	Impregnated with a colourless transparent	
colourless transparent substance	substance to improve its clarity	
Stones which have been treated by Infilling cavities	Treated by infilling cavities	
Stones which are semi translucent or opaque and whose	Treated by infilling to improve its shape	
shape has been improved by fillers		
Stones which have been coated (including painting)	Treated by coating with coloured substance	
Stones which have been stained	Treated by staining with coloured dye	
Stones which have been coated to improve its lustre	Coating has been applied	

- Gemstones, which may have been artificially irradiated, shall be inspected with a Geiger counter for safety, and identification reports shall not be issued for those gemstones from which residual radioactivity has been detected.
- Descriptions of gemstones written in katakana characters derived from foreign languages can be used so long as those descriptions are commonly acceptable and do not misrepresent the gemstone.
- 8. Heating of Blue Sapphires traditionally involves the diffusion of hydrogen but this hydrogen by itself does not produce colour. The industry therefore makes this distinction from the diffusion of artificial colour by heating that uses other light elements such as beryllium from an external source.
- Spectroscopic analyses using instruments such as UV-Visible and FT-IR spectrometers is mandatory for the determination of non-heated corundum, and if further clarification is needed, a comprehensive decision will be arrived at using X-ray fluorescence, Raman spectrometry and/or laser tomographic analyses.

# Industry Regulations Governing The Definition and Nomenclature of Gemstones and Ornamental Materials

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#### In Collaboration with:

The Association of Germological Laboratories Japan Jewellers Town Aurum 5F, 1-26-2 Higashi Ueno, Taito-ku, Tokyo, Japan 110-0015 Tel: 03-3835-8267 Fax: 03-3835-8410