



The Definition and Nomenclature of Pearls

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Japan Jewellery Association

Chapter 1. Classification, Definition and Terms of Pearls

1 – 1 Classification

Ornamental pearls shall be classified as follows according to the origin of their formation:

- a. **Natural pearls**
- b. **Cultured pearls**

1 – 2 Definition

"Pearls" are metabolites formed in living mollusks. Their visible part is composed of substance equivalent to the mollusk nacre. Some metabolites having no nacre are exceptionally included.

1– 2– 1 Natural pearls

Pearls accidentally formed in living mollusks without the aid of any human agency. Natural pearls are classified according to the formation mechanism and features.

1) Natural pearls having nacre

a. Whole round natural pearl

Pearls accidentally formed in a pearl sac within a living mollusk. Its whole surface is covered with nacre.

Note: "Whole round" is a customary word accepted in the pearl industry indicating not round pearls but pearls with surface totally covered with nacre.

b. Natural blister pearl

Pearls accidentally formed in a pearl sac within a living mollusk, thereafter attached to the inner surface of the shell to form a blister by the coverage of its surface with nacre.

c. Natural blister

A blister formed on the inner surface of the nacre by the intrusion of foreign material into a space between the mantle and inner surface of the nacreous shell, or by repair of the shell hole bored by the intrusion of parasite etc, irrespective of whether the internal construction is hollow or of nacreous composition.

2) Natural pearls having no nacre

a. Natural pearls from snail and bivalve

Pearls accidentally formed in a pearl sac within a mollusk having no nacre such as Queen conch (*Strombus gigas*) and clam. The entire surface is covered with non-nacreous layer.

1— 2— 2 Cultured pearls

Pearls formed in living mollusks with the aid of human agency. Its total or main appearing surface is covered with nacre. Human intervention should only give an occasion of pearl formation and substance formed should only be of natural product. Cultured pearls are classified into the following categories according to the formation mechanism and features.

1) Whole round cultured pearl

Pearls with its whole appearing surface covered with nacre, formed in a pearl sac by the origination of a transplanted piece of mantle tissue.

Note: "Whole round" is a customary word accepted in the pearl industry indicating not round pearls but pearls with surface totally covered with nacre.

a. Bead nucleated cultured pearl

Pearls with its whole appearing surface covered with nacre. Formed on the surface of the shell bead or material capable of forming nacre in a pearl sac by artificial insertion together with a piece of mantle tissue.

b. Non-bead nucleated cultured pearl

Pearls with its whole appearing surface covered with nacre. It was formed in a pearl sac by artificial insertion of a piece of mantle tissue only.

2) **Hankei cultured pearl (cultured blister)**

Pearls with its appearing surface covered with nacre. Nacre is formed on the surface of the half-shaped (including three quarter) nucleus artificially attached to the inner surface of the mollusk shell, adhering to the outer epithelium of the mantle. It is irrespective whether the nucleus used remains after cultivation or is removed and replaced with a foreign substance. Whole round natural or cultured pearls, cut or ground to half or three quarter in shape, are excluded from this category.

Three quarter indicates a pearl made by using three fourth of the round or round nucleus.

3) **Blister cultured pearl**

Pearls formed with the aid of human agency in a pearl sac within a living mollusk, thereafter attached to the inner surface of the shell to form a blister by the coverage of its surface with nacre.

1-2-3 **Imitation pearls**

Objects, entire or a part of which are artificially made imitating the appearance, color and other features of natural and cultured pearls, without possessing their physical and chemical properties, even though natural materials are used. It is also imitation, though it has pearl-like appearance, unless the surface layer is composed of natural substance secreted in a mollusk body.

1-3 **Terms and descriptions of pearls by mother oysters and species**

Natural or cultured pearls may be termed by the names of the mother oyster or species, when they can easily be identified by visual characteristics and identification methods.

1-3-1 **Terms of seawater pearls**

Terms of mother oyster name or species name of seawater natural pearls or cultured pearls.

a — 1. Natural pearls (Mother oyster name or species name may be used when it can be identified)

Akoya natural pearl
Silver lipped natural pearl
Black lipped natural pearl
Mabé natural pearl
Abalone natural pearl
Conch natural pearl
Horse conch natural pearl
Melo natural pearl
Pen shell natural pearl
Scallop natural pearl
Quahog natural pearl

a — 2. Natural pearls (Only natural pearl is used when oyster species cannot be identified)

Natural pearl
Natural blister pearl
Natural blister

b — 1. Cultured pearls (Mother oyster name or species name may be used when it can be identified)

Akoya cultured pearl
Silver lipped cultured pearl
Silver lipped *Hankei* cultured pearl
Silver lipped Three-quarter cultured pearl
Silver lipped blister cultured pearl
Black lipped cultured pearl
Black lipped *Hankei* cultured pearl
Black lipped Three-quarter cultured pearl
Black lipped blister cultured pearl
Mabé cultured pearl
Mabé *Hankei* cultured pearl
Mabé Three-quarter cultured pearl
Mabé blister cultured pearl
Abalone *Hankei* cultured pearl
Abalone blister cultured pearl

b—2. Cultured pearls (Only cultured pearl is used when the oyster species cannot be identified)

Cultured pearl

Blister cultured pearl

Cultured blister

1—3—2 Terms of freshwater pearls

Freshwater natural and cultured pearls may not be termed by the species of mothermussels since there are many species that produce pearls, and in the case of cultured pearls, pieces of mantle tissue from different mussel species are sometimes transplanted.

However, when the mussel species can be identified, it may be termed.

Natural pearls

Freshwater natural pearl

Freshwater natural blister pearl

Freshwater natural blister

Cultured pearls

Freshwater cultured pearl

Freshwater cultured blister pearl

Freshwater cultured blister

● **References**

Pearl Standard of Japan Pearl Promotion Society (2009 revised edition)

CIBJO Pearl Book (2009 revised edition)

GIA Pearl Grading System

Koji Wada "Science of the pearl"

Chapter 2. Nomenclature

2—1 Description

Based on the classification provided in Chapter 1, following descriptions are practiced.

2—1—1 Natural pearls

Pearl name. See 1-3 Terms and descriptions of pearl by mother oyster and species.

When the species of mother oyster can be identified, put the prefix "natural" after the species.

Disclosure comments

Specify treatment comments when they are obvious.

2—1—2 Cultured pearls

Pearl name. See 1-3 Terms and descriptions of pearl by mother oyster and species.

When the species of mother oyster can be identified, put the prefix "cultured" after the species.

Disclosure comments

Specify treatment comments when they are obvious.

2—2 Definitions of pearl processes and treatments

Pearls may sometimes undergo various processes and treatments.

2—2—1 Treatments to extract the latent beauty of the pearl

a. *Mae-shori*

To stabilize the color tone and improve luster with organic solvents.

b. Bleaching

To remove pigments and organic matters included in the pearl without damaging its nacre structure.

c. *Choshoku* (rose-tinting)*

To improve the color tone of the pearl to compensate for interference color the pearl originally possessed.

* "*Choshoku*" (rose-tinting) is a specific common expression derived from Akoya cultured pearl treatment.

2-2-2 Treatments to alter color and appearance of the pearl, irrelevant of the characteristics that the pearl originally possesses.

a. Dyeing

To alter the color and appearance of the pearl with natural and synthetic dye, irrelevant of the characteristics that the pearl originally possesses.

b. Coloration

To alter the color and appearance of the pearl with chemicals other than dye, irrelevant of the characteristics that the pearl originally possesses.

c. Irradiation

To alter the color of the nacre and nucleus of the pearl by irradiation (mainly by γ ray).

d. Bleaching with reducing agents and treatment with fluorescence whitening agents

To bleach pearls excessively with reducing bleaching agents and to make white by fluorescence whitening agents.

e. Assembling

To cut and assemble the pearl.

2-2-3 Processing and treatments of *Hankei* cultured pearls (including 3/4 shape)

a. *Hankei* cultured pearl

Pearls cultured by attaching a half shape nucleus (made of plastics etc) to the inner surface of the shell. After the surface of the nucleus is covered with nacre, it is cut out, the nucleus and impurities are removed, inner space is filled with resins or something and the bottom is lid with shell nacre.

b. *Hankei* cultured pearl (with shell)

Pearls cultured by attaching a half shaped, 3/4 shaped and spherically shaped nucleus (made of plastics etc) to the inner surface of the shell. After the surface of the nucleus is covered with nacre, it is cut together with a part of the shell and shaped as an ornament.

c. Three-quarter cultured pearl

Pearls cultured by attaching a 3/4 shaped or spherically shaped nucleus (made of plastics etc) to the inner surface of the shell. After the surface of the nucleus is covered with nacre, it is cut out with a nucleus in it, impurity substance is removed and backed with shell nacre to be finished in round shape.

2—3 Processing and treatments of the pearl and descriptions of their individual disclosure

a. *Mae-shori*, bleaching, *Choshoku* (rose-tinting)

When pearls are treated by *Mae-shori*, bleaching, and *Choshoku* (rose-tinting), disclosure comment of "Specific treatments are done to extract latent beauty" is employed.

b. Color alteration

When pearl colors are altered from the original body colors by decoloration and heating, disclosure comment of "Treatments aiming at color alteration are done" is employed.

c. Processing and treatment of *Hankei* cultured pearls (including 3/4 shape)

Pearls processed to *Hankei* are described in disclosure comment as "Processing and treatments characteristic to *Hankei* cultured pearl".

d. Dyeing, coloring and irradiation

Pearls dyed, colored and irradiated are described in disclosure comment as "Coloring treatments done".

e. Other specific treatments

Pearls processed by other specific treatments should describe the type of processing and treatments.

Examples

Pearls of facet cut \Rightarrow to describe "Facetted · ○○○· shape" in shape column.

Pearls with polished back \Rightarrow to insert comments in shape column any of ○○○ shape (back polished) cut, half cut or three quarter.

Flaw removed and molded pearls \Rightarrow to describe "molded by polishing" as other comment.

Assembled pearls \Rightarrow to describe "pearls are assembled" in disclosure comment.

Imitation pearls made of plastics and shell etc are described as "Imitation pearls" or "imitation".