

Types of sake and their features

Learning outcomes

- Knowledge of sake classification based on rice polishing ratio and addition of alcohol
- Knowledge of flavor and characteristics of premium sake, such as ginjo, daiginjo, junmai

Japan's Liquor Tax Act defines the ingredients and the manufacturing process that must be used for sake production. The Act states that sake must be made from rice, koji and water, as described in Chapter 2, or from these ingredients plus neutral alcohol (ethyl alcohol of agricultural origin, called *jozo*-alcohol) or sugars and certain other ingredients. It also provides special designations (called *tokutei-meisho*) for sake that has a superior flavor and appearance and is produced in accordance with certain criteria pertaining to the ingredients and polishing. Special designations include ginjo, daiginjo, junmai ginjo, junmai daiginjo, junmai and honjoso. These currently account for around 30% of total sake production and can be considered premium sake (Fig. 3.1).

Premium sake labels include the special designation combined with other descriptions, depending on the manufacturing process.

Labeling examples:

Junmai
Junmai nama genshu
Ginjo koshu

This chapter explains the definitions and flavor characteristics of specially designated sake and sake made using other manufacturing processes. It should be noted, however, that the flavor descriptions presented here are of a general nature, as each brand has its own subtle characteristics.

3.1 Specially designated sake and characteristics of each type

The rice used to make specially designated sake must undergo inspection to ensure that it complies with required standards. For each designation, there are also standards regarding the polishing ratio and amount of neutral alcohol used. Furthermore, the amount of koji-mai used in the production of koji rice must be equal to at least 15% of the total weight of polished rice used (Table 7.1).

3.1.1 Ginjo

Ginjo-shu is made with rice grains from which more than 40% of the outer layer has been removed by milling. Fermentation occurs at lower temperatures and takes longer (Sec. 8.5). Jozo-alcohol equivalent to up to 10% of the weight of the polished rice may be added.

It has a fruity fragrance, called *ginjo-ka*, with a light, non-acidic taste. "Light" does not simply mean "mild" or "diluted." The sake should also have a smooth texture (mouthfeel) and a good aftertaste.

The specific characteristics of ginjo-shu vary by brewers, with the more fragrant varieties designed to highlight ginjo-ka and others designed with more emphasis on flavor and less on ginjo-ka.

3.1.2 Daiginjo

Daiginjo-shu is a form of ginjo-shu made with even more highly polished rice from which at least 50% of the outer layer of the grain has been removed. It has an even more refined taste and stronger ginjo-ka than ginjo-shu.

3.1.3 Junmai, tokubetsu junmai

Junmai-shu and tokubetsu junmai-shu are made only from rice, koji and water, highlighting the flavor of the rice and koji more than other varieties. There are no requirements regarding polishing ratio.

Junmai-shu is typically high in acidity and umami, with relatively little sweetness.

3.1.4 Junmai ginjo

Because ginjo brewing techniques are used in making junmai ginjo-shu, the acidity and umami are toned down and there is a clear ginjo-ka.

3.1.5 Junmai daiginjo

Junmai daiginjo-shu is regarded as the highest-grade sake. The best products in this class deliver a good blend of refined taste with acidity and umami.

3.1.6 Honjozo

In honjozo-shu, the emphasis is on flavor and there is little ginjo-ka or aging-induced aroma. It has a reasonable level of acidity and umami and rather than asserting the aroma and taste of the sake itself, it helps to bring out the taste of food.

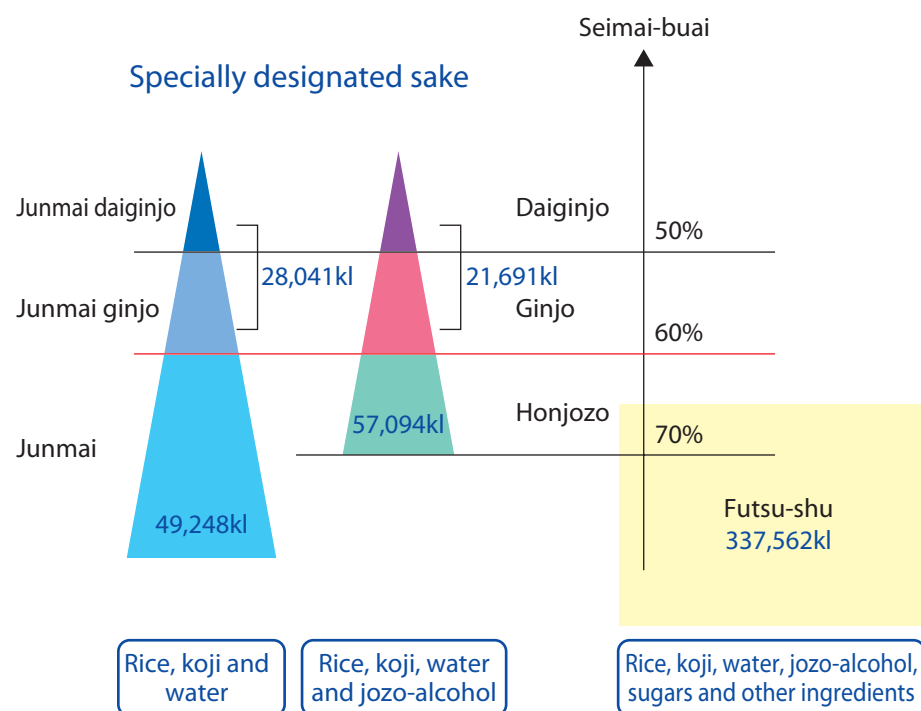


Figure 3.1 Grades of sake

3.2 Futsu-shu (ordinary or non-premium sake) and its characteristics

The bulk of the sake produced in Japan is classified as futsu-shu. The rice used to make futsu-shu is polished to an average of around 70% and the amount of jozo-alcohol used is equivalent to around 20% of the weight of the polished rice.

The aroma of futsu-shu is less pronounced than in specially designated sake. At most, it can be said to have a faint caramel aroma, a result of aging. The taste profiles of futsu-shu also reflect regional taste preferences to a greater extent than premium sake (Sec. 8.10).

3.3 Characteristics of sake made using other manufacturing processes

3.3.1 Nigorizake (cloudy sake)

Nigorizake has a cloudy appearance caused by yeast and fine particles of steamed rice. It has a pronounced taste of rice.

Normally, when the moromi (main mash) is filtered, it is placed in a cloth bag, so the filtered sake is almost clear and contains just traces of sediment. However, for nigorizake a coarse meshed cloth or a net is used, and so some yeast and fine particles of steamed rice remain as sediment in the filtered sake.

3.3.2 Namazake (unpasteurized sake) and nama-chozo-shu (sake unpasteurized at storage)

Namazake and nama-chozo-shu are varieties of sake with the flavor of freshly brewed sake.

Normally, sake is pasteurized twice before being bottled. The purpose of first pasteurization is not only to sterilize it but also to stabilize quality by halting the action of enzymes. Sake is pasteurized a second time at the bottling stage for sterilization. Namazake is not pasteurized at all. Nama-chozo-shu is sake that is stored (chozo) at low temperature at the brewery in unpasteurized form and only pasteurized at the bottling stage.

3.3.3 Koshu (aged sake)

The color of koshu ranges from yellow to amber. It has little ginjo-ka, but has a caramel aroma (with hints of honey, dried fruits, molasses and soy sauce), similar to sherry and madeira, as well as an aroma suggestive of nuts and spices. It has a slightly bitter taste and a long finish. Bitterness is not normally considered a desirable trait in sake, but it is one of the characteristics of long-aged sake.

Sake is usually allowed to age in storage for about six months to a year before shipment. With koshu, the aging process lasts at least three years, during which time the color and flavor change due to the Maillard reaction between the sugars and amino acids present in the sake.

3.3.4 Genshu (undiluted sake)

Because no water is added after production, genshu has a high alcohol content in the 17%–20% range. It normally has a strong taste.

3.3.5 Taruzake (cask sake)

Taruzake is stored for a time in casks made of Japanese cedar, giving it a pleasant cedar aroma.

Until the beginning of the 20th century, sake was normally transported in casks. The sake retailer would transfer the sake from the cask to an earthenware vessel for sale. These days, nearly all sake is bottled, but some Japanese-style pubs or soba restaurants still mainly serve taruzake. Taruzake is also used at opening ceremonies and celebrations in a ritual called *kagami-biraki* in which the cask's round lid (which resembles a traditional mirror or *kagami*) is opened using a wooden mallet and the sake served to all of the guests.

3.3.6 Sparkling sake

There are sparkling varieties in which the sake is carbonated by trapping carbon dioxide produced from second yeast fermentation, or by injecting carbon dioxide. These range widely from sweet products with an alcohol content in the 6%–8% range to those with a high alcohol content and dry taste. They also vary in appearance from clear brews to cloudy nigorizake.

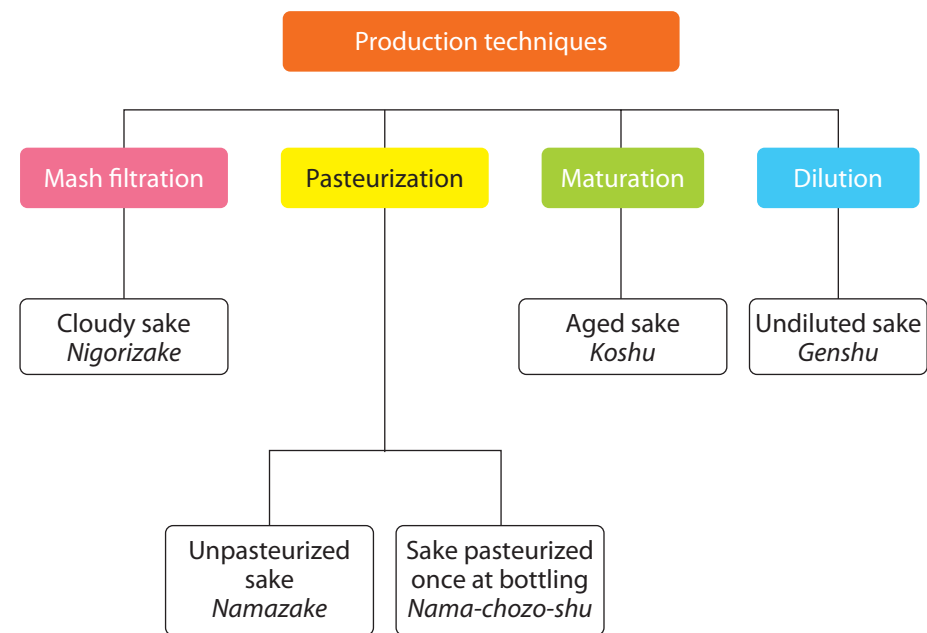


Figure 3.2 Classification of sake based on differences in production techniques