

# ORGANOLEPTIC ANALYSIS OF WINES

## Features of cognac tasting



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## PLAN:

- Features of cognac technology
- Chemical composition
- Classification of cognacs
- Characteristics of the sample: color, bouquet, taste, the typicality



# Regulatory document

- ГОСТ 31732-2014 Cognac. General specifications

## Terms and definitions:

**Cognac** is a wine product with a volume fraction of ethyl alcohol of at least 40.0%, made from cognac distillates obtained by fractionated distillation (distillation) of table wine material produced from *Vitis vinifera* grapes, and aged in contact with oak wood for at least three years.

Note-you can add an adjective derived from the name of the CIS member country that produces these wine products (Russian cognac, Armenian cognac, Kyrgyz cognac, etc.).

Cognac, brandy – a Strong alcoholic drink obtained as a result of distilling (distillation) of grape must with subsequent aging of alcohols in oak barrels

# Terms and definitions:

## Ordinary cognacs:

**Three-year cognac** - Cognac made from cognac distillates aged for at least three years in oak barrels, oak butts or in enameled tanks with oak riveting.

**Four-year cognac** - Cognac made from cognac distillates aged for at least four years in oak barrels, oak butts or in enameled tanks with oak riveting.

**Five-year cognac** - Cognac made from cognac distillates aged for at least five years in oak barrels, oak butts or in enameled tanks with oak riveting.

# Terms and definitions:

## **Aged cognacs:**

**Aged cognac "KV"** - Cognac made from cognac distillates aged for at least six years in oak barrels or oak butts

**"KVVK"** aged cognac of the highest quality is a Cognac made from cognac distillates aged for at least eight years in oak barrels or oak butts

**Old cognac "KS"** - Cognac made from cognac distillates aged for at least ten years in oak barrels or oak butts

**Cognac is very old "OS"** - Cognac made from cognac distillates aged for at least twenty years in oak barrels or oak butts

**Collection cognac** - aged «KV» Cognac, aged cognac of the highest quality "KVVK", old "KS" cognac, very old "OS" cognac, additionally aged in oak barrels or butts for at least three years, without taking into account post-purchase rest

# Stages of production of classic cognac

*Cognac is a city in the French Department of Charente*

**All the stages are strictly controlled!**

1. The cultivation of grapes  
It is allowed to use grape varieties:  
Juny Blanc (98 % cognac), Colombard, Folle Blanche, less often Montil  
Distance between bushes-3 meters, machine cleaning (cheaper production)
2. Getting the wort  
Gentle pressing – the yield of the wort is about 50 % of the mass of grapes
3. Fermentation  
Wort with minimal sulfitation is immediately sent to fermentation  
Sweetening is strictly prohibited.  
Young unenlightened wine materials are stored on a yeast lees  
Characteristic: high acidity and low alcohol content (8-9% vol.)

# Stages of production of classic cognac

## 4. Distillation

Completion of the distillation process-until March 31 of the year following the harvest year

Requirements:

- only within a certain geographical area;
- use of special copper stills-alambik

Stages:

I-first distillation-raw alcohol (milk-colored liquid containing 27-32% alcohol ("brouillis"))

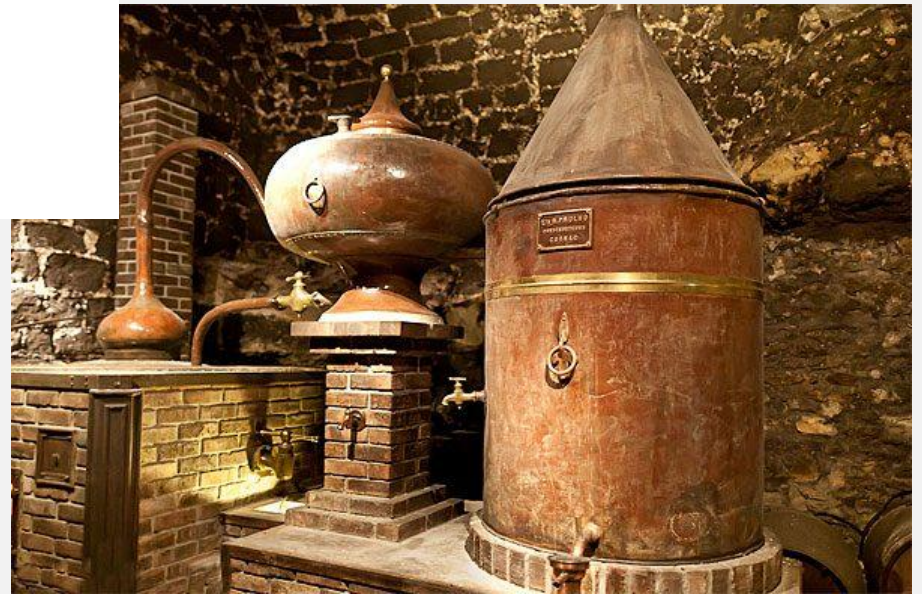
II-second distillation-pure cognac alcohol and fractionation of volatile substances:

1. Head fraction or "head" – high content of unpleasant-smelling volatile substances
2. Average fraction or "body" - 69-72% alcohol for cognac production
3. Tail fraction "tail" - the concentration of alcohol is reduced to 60%, the distillation is stopped; it is not used in the preparation of cognac, but it is allowed to add to the next batch of brouilli

Distillation of one batch of wine material-about 24 hours

From 10 liters-up to 1 liter of pure cognac alcohol

# The Charentais alembic





# Stages of production of classic cognac

## 5. Aging

Duration—at least 30 months (the oldest alcohols—more than 100 years)

Oak barrels that do not have metal parts are not allowed to use glue-based connections.

High – quality oak barrels for cognac—a high price (oak aged at least 150 years; aging barrels in the fresh air for 5 years).

Barrels are reusable.

The evaporation of the alcohol is 0.5 % .about./year (the "angels share"). Evaporated alcohol is absorbed by mold fungi that live on the walls of the cellars.

For 50 years of aging, the strength of cognac decreases from 71 % to 46 %



Aging of cognac alcohol in barrels at a temperature of 15-20°C and relative humidity in the room 75 %

**Aging** - is a complex chemical process and the formation of new substances that determine the bouquet and taste of cognac

During aging-extraction of tannins, lignin, reducing sugars, to a lesser extent amino acids, lipids, volatile acids and oils, resins from the barrel wood. Cognac alcohol acquires a Golden color and is filled with woody-vanilla aromas. Over time, cognac becomes darker in color, softer and rounder, in the aroma and taste there are many shades, including notes of flowers, fruits and spices.

The lower the humidity in the cellar, the more structural the cognac becomes, the higher the humidity in the cellar, the softer and rounder the cognac becomes over the years

# Stages of production of classic cognac

## 6. Blending (assemblage)

Mixing alcohols of different excerpts to produce a ready-made drink

## 7. Adding other ingredients (in most cases)

Add:

- distilled water for strength control
- sugar (maximum 3.5% by volume) to regulate taste
- oak chips
- color (caramelized sugar) to give a rich dark color

## 8. Filling

Cognac is bottled, labeled and sent for sale

# Classification of brandy and French cognacs

Extract:

V. S. (Very special) -2 years

V. O (Very Old or Reserve) -3 years

V. S. O. P. (Very Superior Old Pale) - 4 years

V. V. S. O. P. (Very-Very Superior Old Pale) or Grande Reserve – 5 years, belongs to the category of Premium

X. O. (Extra Old) or Napoleon – 6 years or more

P-Pale, "pale". Transfer of the drink to the category of elite alcohol.

As the aging time in oak increases, the color changes – from an intense, almost orange, to a paler, dark oak or light amber color

Drinks with a long aging period can no longer be classified.

They are given proper names

Leading houses in France:

Martel, Remy Martin, Hennessy, Courvoisier, Gautier, Camus, etc.