ACTIVE DRY YEASTS (A.D.Y.) *Saccharomyces spp.* (OIV-Oeno 329-2009)

1. OBJECT, ORIGIN AND FIELD OF APPLICATION

Yeasts are used for the inoculation of musts and wine. They are proposed under dehydrated form
The rate of inoculation is at the user's discretion.
Yeasts used must be isolated from grapes, musts or wine or result from hybridisation, or have been derived from these same yeasts. The use of genetically modified oenological yeasts will be submitted to prior authorisation of competent authorities.
Oenological yeasts must be kept under conditions which most favour its genetic stability.

2. LABELLING

The following information must be indicated on the label:
- The genus name and specie(s) name in addition to the reference(s) of the strain(s) in the case that there is a registration body.
- Selecting body.
- Operating instructions or method and reactivation media recommended by the manufacturer.
- The minimum number of viable cells per gram of powder (CFU as determined in the annex) guaranteed by the manufacturer, with a storage temperature lower than 15 °C.
- The manufacturing batch number, the expiration date and storage conditions.
- Where relevant, the indication that the yeasts were obtained through genetic modifications and their modified character(s).
- Additives, including substances used during drying operations

3. CHARACTERISTICS

Active dry yeast is in **typically in** the form of round or vermiculated pellets obtained by drying a concentrated yeast culture.

4. TEST TRIAL METHODS AND LIMITS

4.1 - Humidity

Measured by the weight loss of 5 g of product dried at 105 °C until it reaches a constant weight (about 3 hours).
Maximum level should be less than 8 %.

4.2 - Lead

Proceed with the determination according to the method in chapter II of the International Oenological Codex.
Content should be less than 2 mg/kg of dry matter.

4.3 - Mercury

Proceed with the determination according to the method in chapter II of the International Oenological Codex.
Content should be less than 1 mg/kg of dry matter.

4.4 - Arsenic

Proceed with the determination according to the method in chapter II of the International Oenological Codex.
Content should be less than 3 mg/kg of dry matter.

4.5 - Cadmium

Proceed with the determination according to the method in chapter II of the International Oenological Codex.
Content should be less than 1 mg/kg of dry matter.

4.6 – Viable yeasts

Proceed with counting according to the method in chapter II of the International Oenological Codex. Content should be above or equal to 10^{10} CFU/g.

NB: Counting is not applied when marketed yeasts are not *Saccharomyces spp*. or if they are mixtures of *Saccharomyces spp* and non *Saccharomyces.*

4.7 – Yeasts of species different from the species indicated on the label

Proceed with counting according to the method in chapter II of the International Oenological Codex.
Content should less than 10^5 CFU/g.

4.8 - Moulds
Proceed with counting according to the method in chapter II of the International Oenological Codex.
Content should be less than 10^3 CFU/g of powder.

4.9 – Lactic acid bacteria
Proceed with counting according to the method in chapter II of the International Oenological Codex.
Content should be less than 10^5 CFU/g.

4.10 – Acetic acid bacteria
Proceed with counting according to the method in chapter II of the International Oenological Codex.
Content should be less than 10^4 CFU/g.

4.11 - Salmonella
Proceed with counting according to the method in chapter II of the International Oenological Codex.
Absence should be checked on a 25 g sample.

4.12 - *Escherichia coli*
Proceed with counting according to the method in chapter II of the International Oenological Codex using the selective differential medium for *Escherichia coli* MET in annex. A lactic bacteria stock solution is carried out in a Tryptone salt solution with 1g of lactic bacteria for 10 ml of solution (total volume). 2 ml of stock solution are transferred to each dish using 5 different dishes.
Absence should be checked on a 1 g sample.

4.13 - Staphylococci
Proceed with counting according to the method in chapter II of the International Oenological Codex. The presence of staphylococci is evaluated by an enrichment culture in a liquid Giolitti and Cantoni medium followed by a confirmation on a solid Baird Parker medium in the annex.
A lactic bacteria stock suspension is carried out in a salt tryptone solution using 1 g of lactic bacteria for 10 ml of solution (total volume). 10 ml of stock suspension is used to inoculate a Giolitti and Cantoni medium to Tween 80 double concentration. Cultures are incubated 48 hours at 37 °C.

In the case that the Giolitti and Cantoni medium gives positive results, the presence of Staphylococci is confirmed by isolation on a solid Barid Parker medium. A positive culture medium loop is used to inoculate solid BP mediums to obtain isolated colonies.
Absence should be checked on a 1 g sample.

4.14 - Coliforms

Proceed with counting according to the method in chapter II of the International Oenological Codex using a selective differential medium for coliforms, desoxycholate gelose in the annex. A lactic bacteria stock suspension is carried out in a salt tryptone solution using 1 g of lactic bacteria for 10 ml of solution (total volume). 2 ml of stock solution are transferred is each dish using 5 different dishes.

Number should be less than 10^2 CFU/g.

5. ADDITIVES

They must be in conformity with regulations in force.

6. STORAGE CONDITIONS

Storage should be below 15 °C in unopened packs.

Always refer to manufacturer's recommendations.