NEW WINE LABELLING REGULATION

LIST OF 23 AUTHORISED ADDITIVES IN EUROPEAN UNION

OUR ALTERNATIVES



The EU Labelling Regulation 2021/2117 marks a turning point in the wine sector, paving the way for natural oenological alternatives to the use of traditional additives.

We offer you a brief summary of this Regulation followed by a list of oenological solutions suitable for meeting these new needs, while improving the quality of your wines. Bioprotection, natural acidification, chitosan, yeast products... we invite you to discover the different Perdomini-IOC solutions, which will allow you to replace some additives that will trigger the labeling obligation, significantly optimizing the winemaking process.

| OENOLOGICAL SUBSTANCE | FUNCTION |
|------------------------------|------------------------------|
| L-ascorbic acid | Preservative and antioxidant |
| Sulphur dioxide | Preservative and antioxidant |
| Potassium bisulphite | Preservative and antioxidant |
| Potassium metabisulphite | Preservative and antioxidant |
| Potassium sorbate | Preservative and antioxidant |
| Lysozyme | Preservative and antioxidant |
| Dimethyl carbonate (DMDC) | Preservative and antioxidant |
| Citric acid | Acidity regulator |
| Malic acid (D,L-; L-) | Acidity regulator |
| Lactic acid | Acidity regulator |
| Tartaric acid (L+;L-) | Acidity regulator |
| Arabic gum | Stabiliser |
| Metatartaric acid | Stabiliser |
| Yeast mannoproteins | Stabiliser |
| Carboxymethylcellulose | Stabiliser |
| Potassium polyaspartate | Stabiliser |
| Fumaric acid | Stabiliser |
| Argon | Packaging gas |
| Nitrogen | Packaging gas |
| Carbon dioxide | Packaging gas |
| Aleppo pine resin | Other |
| Caramel | Other |



Contact us: info@perdomini-ioc.com www.perdomini-ioc.com



The European Regulation 2021/2117 concerning the labeling of wines and alcoholic beverages will come into force from 8 December 2023 and it will be mandatory to apply it for wines produced from this date. This regulation will require the

presence of additional information on the label compared to the rules already in force.

(WHAT INGREDIENTS

Should be listed?

Raw materials

(grapes, concentrated must if added)

Additives associated with their technological role (see the charts at the beginning)

Allergenic processing aids indicated in bold

INGREDIENTS ARE LISTED IN DESCENDING ORDER OF WEIGHT WHEN THEY REPRESENT MORE THAN 2% OF THE FINISHED PRODUCT.

(THIS ORDER IS THEREFORE IRRELEVANT FOR ADDITIVES)

The additives contained in processing aids in order to stabilize them should not be declared on the label.

Sulphur dioxide (E220), potassium metabisulphite (E224) and potassium bisulphite (E228)

can be grouped together under the term "preservatives (sulphites)"

"Acidity regulators" and

"stabilisers" categories: similar or substitutable products may be indicated in the list of ingredients using the expression "contains... and/or" followed by a maximum of three additives, at least one of which is present in the final product.

Gases used during bottling (carbon

dioxide, argon and nitrogen) may be replaced by the words "bottled in a protective atmosphere" or "bottling may be carried out in a protective atmosphere".

For sparkling wines,

«liqueur de tirage» and «liqueur d'expédition» may be mentioned on their own, without listing their constituents.

INGREDIENT LIST EXAMPLE:

Ingredients: grapes, acidity regulator (L-tartaric acid), antioxidant (L-ascorbic acid), preservatives (sulphites), stabilisers (gum arabic,carboxymethylcellulose and/or metatartaric acid and/or mannoproteins)..

WNDER WHICH FORMAT, will it appear?



ightarrow Physically on the back label

Via QR CODE (electronic labelling)

Platforms (e.g. u-label, vin.co, dansmabouteille, etc.) have already been developed to generate QR codes that can be added to labels, taking up less space than a full list

The collection or tracking of user data will not be authorised, and the list must bekept separate from any other information for commercial purposes.



The energy value It will be the only mandatory nutrition declaration to be reported on the label. It can be expressed by the symbol "E" (for energy), in kJ and kcal per 100 ml.

The full nutritional declaration (fat, saturated fatty acids, carbohydrates, sugars, proteins, salt) may be transmitted digitally. There will be two options for calculating these values:

Using conversion

coefficients (Appendix 14 of Regulation (EU) 1169/2011) based on the alcohol and sugar content of wines.



Using average data established and accepted by the sector.

ZERO ADDITIVE ALTERNATIVES TO PRESERVATIVE:

FIGHT AGAINST OXIDATION

| | ALTERNATIVES* | ADVANTAGES |
|---------|---|--|
| HARVEST | IOC CALYPSO™ Yeast Metschnikowia pulcherrima | Retains copper, consumes dissolved oxygen in musts |
| | ESSENTIAL ANTIOXIDANT™ Gallnut tannin | Protection of musts and wines from oxidation |
| | FULLPROTECT™ Specific inactivated yeast and gallic tannin | Limitation of primary and secondary oxidation |
| | GLUTAROM EXTRA™ Specific inactivated yeast with high glutathione content | phenomena (flavors, color) |
| FINING | No[OX]™ Chitosan and Bentonite | Natural alternative to casein, antioxidant action |
| | | |

ZERO ADDITIVE ALTERNATIVES FOR MICROBIOLOGICAL PRESERVATION AND STABILIZATION

| | ALTERNATIVES* | ADVANTAGES | |
|--------------|---|--|--|
| HARVEST | IOC GAIA™ Yeast Metschnikowia fructicola | Microbiological bioprotection Biosanitization of equipment | |
| VINIFICATION | IOC BE THIOLS™ IOC BE FRUITS™ IOC BE FRESH™ Yeast Saccharomyces cerevisiae | Preservation of the active SO ₂ level by limiting its combination | |
| VINIFIC | MAXIFLORE™ EXTRAFLORE™ Bacteria Oenococcus Oeni | Early stabilization of musts and wines | |
| FINING | IOC SENTINEL™ Chitosan and chitin-glucan | Reduction of bacterial populations. Spectrum of action wider compared to lysozyme or fumaric acid | |
| | | | |

ZERO ADDITIVE ALTERNATIVES FOR ADJUST THE ACIDITY





*All products in the Low SO₂ range and the related alternative route to the use of sulfur dioxide for antiseptic, microbiological stabilization or antioxidant purposes do not need to be indicated on the label.

THE Z ERO ADDITIVE ALTERNATIVES TO SEYAL GUM AND MANNOPROTEINS:

STRUCTURE AND FINING

THE ZERO ADDITIVE ALTERNATIVES FOR COLOR STABILIZATION

| | ALTERNATIVES | ADVANTAGES |
|--------------|---|--|
| VINIFICATION | IOC R9008™ Yeast Saccharomyces cerevisiae | Release of coating polysaccharides during fermentation |
| | FEELWOOD™ Wood Chips | Increased sweetness, sensory notes |
| | EDIFYS INCISO™ Specific inactivated yeast | Limitation of astringency and bitterness by adsorption, greater maturity and softness |
| | EDIFYS RILIEVO™ Specific inactivated yeast | Increases the perception of volume, structure and freshness |
| | ESSENTIAL OAK SWEET™ Ellagic tannins | Increased roundness |
| AING | ESSENTIAL OAK BARREL™ Ellagic tannins | Increased volume |
| FIN | PRIVILEGE BLEU™ Ellagic tannins | Increased finesse |
| | PRIVILEGE NOIR™ Ellagic tannins | Increased structure |

| | ALTERNATIVES | ADVANTAGES | |
|--------------|--|---|--|
| VINIFICATION | FULLCOLOR™ Ellagic tannins, proanthocyanidins, yeast polysaccharides | Long-lasting stabilization of color | |
| | IOC REVELATION TERROIR™ Yeast Saccharomyces cerevisiae | Increased color intensity | |
| | VOLUTAN™ Grape tannin | Color stabilization by | |
| FINING | ESSENTIAL OAK BARREI™ Ellagic tannins | complex formation tannins-anthocyanins | |

THE ZERO ADDITIVE ALTERNATIVES FOR TARTARIC AND CALCIUM STABILISATION

| | ALTERNATIVES | ADVANTAGES | |
|--------|--|---|--|
| | DUOSTAB™ Potassium bitartrate and calcium tartrate | Cold treatment | |
| FINING | CRÈME DE TARTRE MICRONISÉE | Inducers of the crystallization of tartaric salts | |
| | TARTRATE DE CALCIUM | | |



Perdomini-IOC S.p.A. Via Salvo d'Acquisto, 2 - 37036 San Martino Buon Albergo (VR) Tel: +39 045 8788611 Fax: +39 045 8780322 info@perdomini-ioc.com

www.perdomini-ioc.com

