**Technical Specifications**

**Aguardente de Vinho Douro**

Language in which the application is submitted: Portuguese (PT)

1. **Name of geographical indication to be registered**

Aguardente de Vinho Douro

1. **Category of the spirit drink**

Wine spirit

1. **Applicant**

Instituto dos Vinhos do Douro e do Porto, I.P. [The Institute of Wines from the Douro and Porto, I.P.]

Headquarters: Rua dos Camilos, 90,

5050-272 Peso da Régua, Portugal

Front office: Rua Ferreira Borges, 27,

4050-253 Porto, Portugal

1. **National and EU Protection**

Primary Protection in Portugal: Order No 1080/1982 of 17 November 1982

Primary Protection in the European Union: Regulation No 1576/1989 of 29 May 1989

1. **Description of the spirit drink**

 **Physical, chemical and/or organoleptic characteristics**

‘Aguardente de Vinho Douro’ can only be used by wine spirits that have been obtained from wines made using grapes grown in the Douro demarcated region, which have been produced and aged there and which meet the physical, chemical and organoleptic characteristics set out in the law and in the rules issued by the IVDP, I.P., with input from the Interbranch Council.

Article 29(1) of Decree-Law No 173/2009 of 3 August 2009 approving the status of the designations of origin and geographical indication of the Douro demarcated region states that “Douro wine spirits must be made by distilling wine from the Douro demarcated region”.

**Physical and chemical characteristics**

‘Douro’ wine spirits must comply with the relevant legal provisions and have an alcoholic strength by volume that is greater than or equal to 37.5 % vol., a volatile substances content that is greater than or equal to 125 g/hl of 100% alcohol and a methanol content that is lower than or equal to 200 g/hl of 100% alcohol.

**Organoleptic characteristics:**

* **Colour:** ‘Douro’ wine spirit must be clear and have one of the following tones: colourless, lemon, straw-coloured, golden or topaz.
* **Aroma:** The unaged wine spirit may have fresh and fruity aromas (fruits growing on trees, grapes, citrus) as well as floral aromas.

Aged spirits normally have aromas of vanilla, dried fruits, spices, roasted notes or more or less developed smoky notes, depending on the type of wood and the ageing time.

* Taste: ‘Douro’ wine spirit must have a smooth, soft, rounded flavour with a good balance between the integrated notes of alcohol and the body, with a pleasant medium to long finish.
* The wine spirit may acquire a better structure on the palate if aged in new wood which can be complemented by ageing in old wood, lending it increased complexity.

'Aguardente de Vinho Douro' can only be used by wine spirits obtained from wines made with grapes produced in the Douro demarcated region. However, it is not compulsory for the wine which is used to make 'Aguardente de Vinho Douro' to be wine certified with the ‘Douro’ PDO. In the case of 'Aguardente de Vinho Douro', the Douro designation refers to wine spirits and not to wine. In other words, it is accepted that wines which are eligible for the ‘Douro’ PDO may be used to produce 'Aguardente de Vinho Douro' since they meet the characteristics specified above.

The Douro demarcated region meets the unique conditions for the production of wine spirits due to the particular nature of its soil and climate which include:

* Protection from moist maritime winds by the Marão and Montemuro mountains, which also influences the temperature of the Douro river basin and the mountains surrounding the Douro demarcated region;
* The orography of the region is characterised by its range of orientation and variable altitudes;
* The soil is composed of schist, which is rare or absent from the neighbouring areas, but is prominent in the Douro demarcated region.

The diversity of grape varieties also allows the oenologist to make the best choice when producing wines with unique features due to their moderate alcohol content and high acidity, and these are used in 'Aguardente de Vinho Douro'. These spirits obtained from continuous or discontinuous distillation are founded on fruity aromas and fresh, soft flavours which become more complex and pleasant with compulsory minimum ageing of one year in wood or where the capacity of the barrels is under 1 000 litres for at least six months.

**Specific characteristics** (compared to spirit drinks of the same category)

‘Douro’ wine spirits must reflect the raw material from which they are made and the ageing process, where applicable. 'Reflect the raw material' means that is a wine spirit and not a grape marc spirit, that is that the raw material used in 'Aguardente de Vinho Douro' is wine (produced with grapes produced in the Douro demarcated region). The expression 'raw material' does not concern the labelling, but rather the manufacturing process and the characteristics of 'Aguardente de Vinho Douro'.

Type of oenological practice: **Cultivation methods**

Vines intended for the production of wines that are liable to be used to make the ‘Douro’ wine spirits described in the legislation on the designation of origin of the Douro demarcated region passed by Decree-Law No 173/2009 of 3 August 2009 must be located within the Douro demarcated region and be grown using resources that are adapted to the location so as to maximise the suitability of the grapes and ensure a high quality output.

1. **Geographical area of the Region**

The geographical area where ‘Aguardente de Vinho Douro’ is produced consists of the following districts, municipalities and parishes, which have traditionally been grouped together in three more restricted geographical areas (subregions):

Baixo Corgo: The district of Vila Real is formed by the municipalities of Mesão Frio, Peso da Régua and Santa Marta de Penaguião; the parishes of Abaças, Ermida, Folhadela, Guiães, Mateus, Nogueira, Nossa Senhora da Conceição (part), Parada de Cunhos, São Dinis and São Pedro, in the municipality of Vila Real; in the district of Viseu, the parishes of Aldeias, Armamar, Folgosa, Fontelo, Santo Adrião, Vacalar and Vila Seca, in the municipality of Armamar; the parishes of Cambres, Ferreiros de Avões, Figueira, Parada do Bispo, Penajóia, Samodães, Sande, Santa Maria de Almacave, Sé and Valdigem and the Quinta de Foutoura, Quinta do Prado and Quinta das Várzeas estates, in the parish of Várzea de Abrunhais, in the municipality of Lamego; the parish of Barrô, in the municipality of Resende;

Cima Corgo: in the district of Vila Real, it consists of the parishes of Alijó, Amieiro, Carlão, Casal de Loivos, Castedo, Cotas, Favaios, Pegarinhos, Pinhão, Sanfins do Douro, Santa Eugénia, São Mamede de Riba Tua, Vale de Mendiz, Vilar de Maçada and Vilarinho de Cotas, in the municipality of Alijó; the parishes of Candedo, Murça and Noura, in the municipality of Murça; the parishes of Celeirós, Covas do Douro, Gouvães do Douro Gouvinhas, Paços, Paradela de Guiães, Provesende, Sabrosa, São Cristóvão do Douro, São Martinho de Anta, Souto Maior, Vilarinho de São Romão, in the municipality of Sabrosa in the district of Viseu the parishes of Castanheiro do Sul, Espinhosa, Ervedosa do Douro, Nagozelo do Douro, Paredes da Beira, São João da Pesqueira, Soutelo do Douro, Trevões, Vale de Figueira, Valongo dos Azeites, Várzea de Trevões and Vilarouco, in the municipality of São João da Pesqueira; the parishes of Adorigo, Barcos, Desejosa, Granjinha, Pereiro, Santa Leocádia, Sendim, Tabuaço, Távora and Valença do Douro, in the municipality of Tabuaço; in the district of Bragança the parishes of Beira Grande, Castanheiro do Norte, Carrazeda de Ansiães, Lavandeira, Linhares, Parambos, Pereiros, Pinhal do Norte, Pombal, Ribalonga, Seixo de Ansiães and Vilarinho de Castanheira, in the municipality of Carrazeda de Ansiães;

Douro Superior: in the district of Bragança, it consists of the parish of Vilarelhos in the municipality of Alfândega da Fé; the parishes of Freixo de Espada à Cinta, Ligares, Mazouco, Poiares, in the municipality of Freixo de Espada à Cinta; the properties that formerly belonged to Ms Maria Angélica de Sousa Pinto Barroso, in the parish of Frechas, and those of the Sociedade Clemente Meneres, in the parishes of Avantos, Carvalhais, Frechas and Romeu, in the municipality of Mirandela; the parishes of Açoreira, Adeganha, Cabeça Boa, Horta, Lousa, Peredo dos Castelhanos, Torre de Moncorvo and Urros, in the municipality of Torre de Moncorvo; the parishes of Assares, Freixiel, Lodões, Roios, Sampaio, Santa Comba da Vilariça, Seixo de Manhoses, Vale Frechoso and Vilarinho das Azenhas, the Quinta da Peça e Quinta das Trigueiras estates and the Vimieiro properties located in the parish of Vilas Boas, and Vila Flor, in the municipality of Vila Flor; in the municipality of Guarda the parish of Escalhão, in the municipality of Figueira de Castelo Rodrigo; the parishes of Fontelonga, Longroiva, Meda, Poço do Canto, in the municipality of Meda; the municipality of Vila Nova de Foz Côa.

**Map of the Region**

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1. **Method for obtaining the spirit drink**

**Vinification**

Only wines made in the Douro demarcated region may be used for the production of ‘Aguardente de Vinho Douro’.

Wines unfit for consumption may not be used for the production of ‘Aguardente de Vinho Douro’.

The wine-making process is carried out without adding sulphur dioxide, and the oenological methods and practices which are legally authorised and traditional to the region must be followed, with the specific features defined in the internal rules of the IVDP, I.P.

**Conservation and distillation**

Wine that is intended for the production of ‘Aguardente de Vinho Douro’ must be distilled at the latest by the end of the month of March immediately following vinification. The distillation must be carried out within the region, unless otherwise authorised subject to the conditions set by the IVDP, I.P..

The systems used in the distillation may be continuous or discontinuous distillation.

**Ageing**

Ageing is carried out within the Douro demarcated region for at least one year in oak casks or for at least six months if the capacity of the casks is less than 1 000 litres.

Checking and recording of ages is done by the Institute of Wines from the Douro and Porto, I.P.

No additives are allowed, with the exception of water that has been distilled, demineralised, subjected to an ion exchange permutation process or softened, in order to reduce the alcoholic strength of the spirit to a minimum of 37.5 % by volume.

‘Douro’ wine spirits must not be flavoured. This does not exclude traditional production methods.

Caramel may only be added to ‘Douro’ wine spirits, up to a maximum of 2 %, to alter the colour.

1. **Link with the geographical environment or origin**

 **Details of the geographical area or origin relevant to the link**

Located in north-eastern Portugal in the Douro river basin and surrounded by mountains that give it specific mesological and climatic characteristics, the region covers a total surface area of 250 000 hectares and is divided into three naturally distinct subregions. These characteristics of the Douro region have an impact on how its natural resources are harnessed for economic purposes and on the activities that are carried out.

Vines intended for the production of wines liable to be used to make ‘Douro’ wine spirit must be planted in soils that are mostly schistous in origin, without excluding some patches of granite-based soils.

There are two different types of soils:

a) Soils where human activity has had a major impact as a result of the clearing and terracing work which precedes the planting of the vines, notably through heavy earthworks and forcibly breaking down the rock to deepen the soil profile, thus altering the original morphology. Fertilisers are also added.

b) Another group formed by soil units where the impact of human activity has been gentler and the soil has conserved its original profile and changes are limited to the top layer.

The individuality of the Douro demarcated region is due to its location. The Marão and Montemuro mountain ranges have a significant influence, serving as a barrier against humid westerly winds. Set in deep valleys that are protected by mountains, the region typically has very cold winters and very hot, dry summers.

Rainfall distribution is asymmetric, with regular variations during the year. It peaks in December and January (in some places, in March) and is lowest in July or August. Exposure to sunlight, a physiographical factor of great importance in the climatic characteristics of any region, is of particular interest in the Douro region because it provides an insight into how the vines behave in different scenarios. The north bank of the river is affected by the dry southerly winds, whereas the south bank is exposed to the colder and more humid northerly winds and receives less sunshine. The air temperature is higher in the south-facing areas than in the north-facing areas. The annual average temperatures vary between 11.8 and 16.5 C. The maximum values of the average annual temperatures are distributed along the length of the River Douro and the valleys carved by its tributaries, in particular those on the right bank. Fluctuations in daytime and night-time temperature are more pronounced in Barca d’Alva and less pronounced in Fontelo. This can be explained by their distance from the sea in each case.

The characteristics of the climate, relief and mesology of the Douro demarcated region have an impact on how its natural resources are harnessed for economic purposes and on the activities carried out there.

Viticulture is the main farming activity in the region and it is carried out in particularly harsh climatic conditions and stony soils that have no alternative purpose. Terracing techniques had to be used to plant vines in the areas with the steepest slopes. Vine-training was the solution found to adjust the influence of the climate and soil to the needs of the plant and achieve the intended output. Although in the majority of cases vines are the only crops grown, they co-exist with almond and olive trees on the borders of the parcels.

The most important features are the way the land is prepared and the crucial role played by the man-made terraces which are typical throughout the region.

Before the Phylloxera crisis, a blight that first appeared in the region in 1862, the vines used to be planted on small irregular terraces (called ‘geios’ in Portuguese) in one or two rows, supported by stone walls. The terraces were ‘ripped’ into the slopes from the bottom up. The walls were built using stones collected from the land and their height depended on how sloped the parcel was. The earthworks involved in preparing the soil for planting were quite minor. The planting density was about 3 000 - 3 500 vines per hectare. These narrow terraces were subsequently abandoned and nowadays they are known as ‘mortórios’ (derelict terraces) in Portuguese.

After the Phylloxera blight, new terraces were built. These were wider and more sloped. Some had supporting walls, thus enabling higher planting densities (around 6 000 plants per hectare). It was also at this time that the planting of vines on natural slopes started, following the contours of the land. In these systems, mechanisation is impossible because either there are no roads allowing access to the vines or they are in scarce supply. Side slopes are associated with high planting density.

Given the elevated labour costs involved, this type of vines have gradually been abandoned. The arrival of mechanisation to the region called for new ways to structure the land. A new system emerged in the late 1960s and early 1970s.

This consisted of horizontal platforms or ‘patamares’ supported by earth banks, containing one or two rows if vines with low planting density of about 3 000 - 3 500 plants per hectare. Given that it requires large parcels of land, this system is not suited to areas where holdings tend to be small.

In more recent times, as an alternative to the ‘patamares’ or platforms, vertical planting of vines or ‘vinha ao alto’ has developed. With a planting density that is similar to that of traditional vines, i.e. about 4 500 - 5 000 plants per hectare, this system is well-suited to small parcels as the mechanical work can be carried out using cranes or even direct traction systems using tractors equipped with tracks for slopes of up to 40 %.

Given the diversity of the grape varieties, altitudes, direction of orientation and levels of rainfall in the Douro demarcated region, it is possible to obtain must and wine containing normally desirable characteristics and so achieve a favourable distillation and the production of 'Aguardente de Vinho Douro' of good quality. Therefore it is viable to produce wines with a tendency to have moderate alcohol levels and high acidity, but which are fresh and elegant and have the complexity characteristic of Douro demarcated region wines. All these factors make for a distillation that enhances aromas linked to the grape varieties and the wines of the Douro demarcated region, which are especially evident in the spirits which have not been subjected to ageing. In these wine spirits it is common to find fresh and fruity spirits (fruits growing on trees, grapes, citrus fruit) as well as floral aromas.

The wine spirits may acquire a better structure on the palate if aged in new wood which can be complemented by ageing in old wood, lending them increased complexity. In these cases, the spirits normally have aromas of vanilla, dried fruits, spices, roasted notes and more or less developed smoky notes, depending on the type of wood and the ageing time.

The wine spirits must be clear and colourless, or citrus, straw-coloured, golden or topaz in colour. 'Aguardente de Vinho Douro' must have a smooth, soft, rounded flavour with a good balance between the integrated notes of alcohol and the body, with a pleasant medium to long finish.

**Specific characteristics of the spirit drink attributable to the geographical area**

**Data about the product**

Total or partial destalking is followed by crushing, which is usually done in stone containers known as ‘lagares’ without any mechanical assistance. This work used to be carried out on an exclusively manual basis. It is now possible to produce wines that can be used to make ‘Douro’ wine spirits at wine-making facilities equipped with state-of-the-art technology, where the crushing and maceration are now fully mechanised.

The characteristics of the wines which can be used to make ‘Douro’ wine spirits owe their origin to the complexity of the natural and human factors of the Douro demarcated region.

**Causal link between the geographical area and the quality or characteristics of the product or a particular quality, the reputation or other characteristics of the product**

The link between the characteristics of the wines that are liable to be used to make ‘Douro’ wine spirits with the demarcated region is the result of the region’s unique soil and climate and the process whereby the product is made.

The varieties that are suitable for making wines that are liable to be used to make ‘Douro’ wine spirits are decisive in determining the qualitative features - particularly as regards aroma and taste - of those wines and an expression of the terroir of the Douro demarcated region. The region’s wide range of native varieties have been preserved. This diversity has contributed substantially to the uniqueness and typical character of the wines which can be used to make ‘Douro’ wine spirit.

1. **Supplement to the geographical indication**

Bottling outside the demarcated geographical area is not authorised by the certification body.

**Description of the condition:**

The defence of the 'Douro' designation of origin, including ‘Aguardente de Vinho Douro’ and the inherent protection of consumers, the international prestige of such a designation of origin, the guarantee of quality and genuineness of the products with this designation of origin, the suitability of the certification of the final product, a complex operation which is not reduced to the physico-chemical and organoleptic analysis as it also includes checking and controlling the product presentation, its labelling and terms, as well as packaging, all require that certification can only be considered to be concluded after bottling at origin. This effectively ensures the quality and authenticity of the 'Douro’ designation of origin.

In reality, the reputation of the 'Douro' designation of origin means that the whole process of production, ageing and bottling must be accompanied by efficient control and assessment measures in order to prevent fraud and other illegal practices likely to affect its image among national and foreign consumers. It is therefore important to safeguard the suitability of the certification of the final product, which is a complex operation involving not only physico-chemical and organoleptic analyses but also the verification and control of the product presentation, including labelling, designations and terms.

Certification is only effectively guaranteed when it is carried out after bottling. Bottling is rightly considered to be the key moment for guaranteeing authenticity and the only way to protect the reputation of the industrial property rights of the 'Douro' designation of origin.

**Restrictions on packaging**

Wine spirit distilled from Douro wine must be bottled within the Douro demarcated region. The arguments justifying this requirement are as follows:

1. The defence of the 'Douro' designation of origin and the inherent protection of consumers, the international prestige of such a designation of origin, the guarantee of quality and genuineness of the products with this designation of origin, the suitability of the certification of the final product, a complex operation which is not reduced to the physico-chemical and organoleptic analysis as it also includes checking and controlling the product presentation, its labelling and terms, as well as packaging, all require that certification can only be considered to be concluded after bottling at origin,. The quality and authenticity of 'Aguardente de Vinho Douro' can only be guaranteed in this way, and the same is true of the reputation of this designation of origin via this control of its particular characteristics.
2. In reality, the reputation of the 'Douro' designation of origin and the international prestige generated by the quality and authenticity of this product call for the respective production and marketing to be accompanied by efficient control and assessment measures in order to prevent fraud and other illegal practices likely to affect its image among national and foreign consumers. It is therefore important to safeguard the suitability of the certification of the final product, which is a complex operation involving not only physico-chemical and organoleptic analyses but also the verification and control of the product presentation, including labelling and the designations and terms characterising 'Aguardente de Vinho Douro' .
3. Certification is only effectively guaranteed when it is carried out after bottling . This is why the State has reserved the right to place the seal of origin of the Wine spirit from Douro wine on spirits bottled within the Douro demarcated region and the Vila Nova de Gaia warehouse. Bottling is rightly considered to be the key moment for guaranteeing the authenticity of the product and the only way to protect the reputation of the industrial property rights of the 'Douro' designation of origin.
4. The obligation to bottle in the production region, the objective of which is to preserve the great reputation of the 'Douro' designation of origin via enhanced control of its individual characteristics and its qualities, is justified to the extent that it protects the designation of origin from which all producers benefit and which is very important for them.
5. This is a necessary and proportionate way of carrying out the objective, as there are no alternative and less restrictive measures likely to achieve it. It is important to stress the importance of the special characteristics and, in particular, the quality of the product, as the cornerstone of its reputation. In fact the image of the designation of origin for consumers essentially depends on the specific characteristics and, more generally, on the quality of the product. It is on the latter that the product’s reputation is ultimately based.
6. 'Aguardente de Vinho Douro' is a very specific product. Its specific qualities and characteristics, which result from the combination of natural and human factors, are linked to its geographical area of origin and require permanent and systematic vigilance and efforts to be maintained.
7. Transport in bulk affects the stability of the product in terms of its physical-chemical and organoleptic characteristics, jeopardising its quality and consequently the right to use the 'Douro' designation of origin.
8. However bulk transport within the Douro demarcated region and the Vila Nova de Gaia warehouse (i.e. transport to facilities other than the production facilities, but always within the demarcated region) is allowed as long as the following conditions are met:
	1. The prior existence of a specific current account for the wine spirit from the producer in question;
	2. The installations at the point of origin and at the destination will have been previously registered and approved by the IVDP, IP;
	3. Transport can only be carried out via prior communication and the authorisation of the IVDP, IP which will verify whether the transport conditions and their duration do not affect the quality of the product;
	4. Transport must always be monitored by inspectors from the IVDP, IP;
	5. Samples must be taken before and after transport;
	6. The samples taken before and after transport will be subject to physico-chemical and organoleptic analysis;
	7. The samples taken before and after transport must not have differences in quality;
	8. Samples of the spirit will always be taken at the time of bottling and after bottling;
	9. The samples taken in accordance with the above paragraph will be analysed form a physical-chemical and organoleptic standpoint and this analysis will be the prerequisite for the attribution for the Douro designation of origin;
	10. In conclusion, the ‘Douro’ designation of origin can only be used if, after bottling, the spirit complies with the specifications and all the above conditions have been respected.

The obligation to bottle in the production region, the objective of which is to preserve the great reputation of the 'Douro' designation of origin via enhanced control of its individual characteristics and its qualities, is justified to the extent that it protects the designation of origin from which all producers benefit and which is very important for them.

This is a necessary and proportionate way of carrying out the objective, as there are no alternative and less restrictive measures likely to achieve it. It is important to stress the importance of the special characteristics and, in particular, the quality of the product, as the cornerstone of its reputation. A quality wine spirit like 'Aguardente de Vinho Douro' is a highly specific product. Its specific qualities and characteristics which result from the combination of natural and human factors are linked to its geographical area of origin and require permanent and systematic vigilance and efforts to be maintained.

1. **Specific rules on labelling**

The labelling of 'Aguardente de Vinho Douro' has to be done in accordance with legal standards and those laid down by the certifying body to which it is first submitted for approval.

1. **Body which checks compliance with the provisions of the product specification**

Instituto dos Vinhos do Douro e do Porto, I.P. [The Institute of Wines from the Douro and Porto, I.P.]

Headquarters: Rua dos Camilos, 90,

5050-272 Peso da Régua, Portugal.

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4050-253 Porto, Portugal.