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COMMISSION REGULATION (EC) No 3199/93

of 22 November 1993

on the mutual recognition of procedures for the complete denaturing of alcohol for the purposes of exemption from excise duty

(OJ L 288, 23.11.1993, p. 12)

Amended by:

		Official Journal		
		No	page	date
►M1	Commission Regulation (EC) No 2546/95 of 30 October 1995	L 260	45	31.10.1995
►M2	Commission Regulation (EC) No 2559/98 of 27 November 1998	L 320	27	28.11.1998
►M3	Commission Regulation (EC) No 2205/2004 of 21 December 2004	L 374	42	22.12.2004
►M4	Commission Regulation (EC) No 1309/2005 of 10 August 2005	L 208	12	11.8.2005
►M5	Commission Regulation (EC) No 2023/2005 of 12 December 2005	L 326	8	13.12.2005
►M6	Commission Regulation (EC) No 67/2008 of 25 January 2008	L 23	13	26.1.2008
►M7	Commission Regulation (EC) No 849/2008 of 28 August 2008	L 231	11	29.8.2008
►M8	Commission Implementing Regulation (EU) No 767/2011 of 2 August 2011	L 200	14	3.8.2011

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COMMISSION REGULATION (EC) No 3199/93

of 22 November 1993

on the mutual recognition of procedures for the complete denaturing of alcohol for the purposes of exemption from excise duty

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Directive 92/83/EEC of 19 October 1992 on the harmonization of the structures of excise duties on alcohol and alcoholic beverages ([1]), and in particular Article 27 (4) thereof,

Having regard to Council Directive 92/12/EEC of 25 February 1992 on the general arrangements for products subject to excise duty and on the holding movement and monitoring of such products ([2]), as amended by Directive 92/108/EEC ([3]), and in particular Article 24 thereof,

Having regard to the opinion of the Committee on Excise Duties,

Whereas pursuant to Article 27 (1) (a) of Directive 92/83/EEC, Member States are required to exempt from excise duty alcohol which has been completely denatured in accordance with the requirements of any Member State, provided that such requirements have been duly notified and accepted in accordance with the conditions laid down in paragraphs 3 and 4 of that Article;

Whereas objections have been received to the requirements notified;

Whereas, therefore, in accordance with the requirements of paragraph 4 of the said Article a decision is to be taken in accordance with the procedure laid down in Article 24 of Directive 92/12/EEC,

HAS ADOPTED THIS REGULATION:

Article 1

The denaturants which are employed in each Member State for the purposes of completely denaturing alcohol in accordance with Article 27 (1) (a) of Directive 92/83/EEC are as described in the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

([1]) OJ No L 316, 31. 10. 1992, p. 21.
([2]) OJ No L 76, 23. 3. 1992, p. 1.
([3]) OJ No L 390, 31. 12. 1992, p. 124.

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ANNEX

Belgium

Five litres of methylene per 100 litres of ethyl alcohol irrespective of the alcoholic strength and sufficient colourant to produce a good markable blue or purple (violet) colour.

The following are included within the meaning of 'methylene':

— actual methylene, that is to say raw methyl alcohol produced from the dry distillation of wood and containing at least 10 % by weight of acetone,

— a mixture of methylene and methanol containing at least 60 % by weight of actual methylene and 10 % by weight of acetone,

— a mixture of methanol, acetone and pyrogenetic impurities with a strong empyreumatic colour, containing at least 10 % by weight of acetone.

Denmark

Per hectolitre pure alcohol:

— 2 litres methylehtylketone, and

— 3 litres methylisobutylketone.

Germany

Per hectolitre pure alcohol:

1) 0,75 litres methylethylketone, consisting of

   — 95 to 96 % by weight of methylethylketone,

   — 2,5 to 3 by weight of methylisopropylketone,

   — 1,5 to 2 by weight of ethylisoamylketone (5-methyl-3-heptanon)

   together with 0,25 litres of pyridine bases;

2) One litre methylethylketone, consisting of

   — 95 to 96 % by weight of methylethylketone,

   — 2,5 to 3 % by weight of methylisopropylketone,

   — 1,5 to 2 % by weight of ethylisoamylketone (5-methyl-3-heptanon),

   together with one gram denatonium benzoate.

▼M7

Greece

Low quality ethyl alcohol (heads and tails from distillation), with an alcoholic strength of at least 93 % vol and not exceeding 96 % vol, to which the following substances are added per hectolitre of hydrated alcohol of 93 % vol:

— Methanol: 2 litres,

— Spirit of turpentine: 1 litre,

— Lamp Oil: 0,50 litre,

— Methylene blue: 0,40 grams.

At a temperature of 20 °C, the end product should reach, in its unaltered state, 93 % vol.

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Spain

Per hectolitre of pure alcohol:

— 1 gram denatonium benzoate,

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— 2 litres methylethylketone (butanone), and

— 0,2 grams methylene blue (CI basic blue 52015).

France

To one hectolitre ethyl alcohol at 90 % vol add:

— 3,5 litres of methylene, and

— 1 litre of isopropyl alcohol.

'Régie type' — methylene

Definition:

In accordance with the ministerial decision of 7 May 1955, taken after consultation of the laboratory service of the Ministry of Economic Affairs and Finance, 'régie type' methylene must satisfy the following requirements:

— it must register 90 % vol at a temperature of 20 °C, with a tolerance of 0,5,

— it must contain at least 6 % pyrogenic impurities (disregarding products that can be saponified by soda and expressed as methyl acetate),

— it must contain ketones and water to bring the methyl alcohol up to 100,

— it must be obtained exclusively from the carbonization of wood, carried out under the supervision of the tax authorities.

The pyrogenic impurities are the real denaturant. They give the mixture an unpleasant taste, making the alcohol unfit for oral consumption.

Through its chemical properties, acetone makes it easier, in the laboratory, to isolate the denaturant in the alcohol.

Lastly, methyl alcohol indicates denaturation. Its boiling point is much the same as that of ethyl alcohol. It can therefore be separated only by using special techniques and apparatus.

In principal, its presence, above a certain percentage, which varies according to the different types of ethyl alcohol, indicates whether the alcohol analysed has been previously denatured by the general process.

Ireland

Mineralized methylated spirits:

— 9,5 % wood naphtha,

— 0,5 % crude pyridine,

— 0,025 ounce methyl violet dye (per 100 gallons of pure ethyl alcohol),

— 0,375 % petroleum oil.

NB: The wood naphtha and crude pyridine may be substituted with 10 % methyl alcohol.

▼M3

Italy

The ethyl alcohol to be denatured must have a ethyl alcohol content of at least 83 % by volume and a strength measured on the EC alcoholmeter of at least 90 % by volume. Per anhydrous hectolitre, add:

(a) 125 grams of thiophene,

(b) 0,8 grams of denatonium benzoate,

▼M3

(c) 3 grams of CI reactive red 24 (red colorant), solution at 25 % w/w,

(d) 2 litres of methyl ethyl ketone.

In order to ensure the complete solubility of all the components, the denaturant mixture must be prepared in ethyl alcohol below 96 % by volume measured on the EC alcoholmeter.

Denaturation is achieved by the substances listed at points (a), (b) and (d). Thiophene and denatonium benzoate alter the organoleptic characteristics of the product, making ingestion impossible, while methyl ethyl ketone, with a boiling point (79,6 °C) close to that of ethyl alcohol (78,9 °C), is difficult to eliminate except by non-economic techniques. This facilitates checks by the financial authorities to identify possible misuse.

The purpose of CI reactive red 24 is to give the product a characteristic red colour, which makes the purpose of the product immediately identifiable.

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Luxembourg

Five litres methylene per hectolitre of ethyl alcohol irrespective of the alcoholic strength and sufficient colourant to produce a good markable blue or purple (violet) colour.

The following are included within the meaning of ‘methylene’:

— actual methylene, that is to say raw methyl alcohol produced from the dry distillation of wood and containing at least 10 % by weight of acetone,

— a mixture of methylene and methanol containing at least 60 % by weight of actual methylene and 10 % by weight of acetone,

— a mixture of methanol, acetone and pyrogenetic impurities with a strong empyreumatic odour, containing at least 10 % by weight of acetone.

Netherlands

Per hectolitre of ethyl alcohol:

Five litres of a mixture consisting of:

— 60 % by volume of methanol,

— 11 % by volume of fusel oil (a concentrate of by-products of alcohol distillation),

— 20 % by volume of acetone,

— 8 % by volume of water,

— 0,5 % by volume of butanol,

— 0,5 % by volume of formalin (a watery solution of 37 % by weight of formaldehyde),

together with colouring the quantity and constituents of which meet the conditions laid down by the chemist of the Fiscal Service.

▼M1

Austria:

1. Per hectolitre of ethyl alcohol: 0,5 kilogram of fusel oil (by-product of alcohol rectification), 0,05 kilogram of gas oil from CN code 2710 and 1 kilogram of methylethylketone; or

2. per hectolitre of ethyl alcohol in the form of feints as a by-product of the rectification of agricultural alcohol:

   1 kilogram of fusel oil (by-product of alcohol rectification),

   0,01 kilogram of gas oil from CN code 2710 and 0,2 kilogram of methylethyletone.

▼M1

Portugal:

Impure ethyl alcohol containing per hectolitre a minimum of 5 litres of methanol and higher alcohols, of an alcoholic strength by volume of not less than 90 % and not more than 96 %, to which is added per hectolitre:

— 2 litres of essence of turpentine or petroleum, and

— 2 grams of malachite green or methylene blue.

Finland:

Per hectolitre of ethyl alcohol:

1. 2 litres methylethylketone, and 3 litres methylisobutylketone,

2. 2 litres acetone, and 3 litres methylisobutylketone,

3. 3 litres acetone, and 2 grams of denatonium benzoate.

Sweden:

Per hectolitre of ethyl alcohol:

1. 2 litres methylethylketone, and 3 litres methylisobutylketone

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United Kingdom

Base:

— 90 % vol ethanol,

— 9,5 % vol 'wood naptha' ([1]), and

— 0,5 vol crude pyridine.

To each 1 000 litres of which is added:

— 3,75 litres of mineral naptha (petroleum oil) and

— 1,5 ppm of methyl violet.

▼M4

Cyprus

For every 100 litres of ethyl alcohol:

5 litres denaturing methanol,

0,5 litre mineral naptha (known as kerosene oil),

2 cc (cubic centimetres) methylene blue (methyl violate).

'Denaturing methanol' means either:

(a) pure methyl alcohol to which has been added not less than 1 % by volume of pyridine,

or

(b) wood naptha to which has been added not less than 0,25 % by volume of pyridine.

([1]) Wood naptha is a product which may be synthetic but must produce such properties as to render a mixture of 5 % wood naptha with 95 % spirits unfit for use as a beverage. This is achieved by producing a relatively complex but stable 'cocktail' of substances which cannot be easily removed from the spirits.
Composition of 'wood naptha'
There is no prescriptive list of ingredients, but some or all of the following are found in approved synthetic wood naptha:
— pyridine,
— pyridine bases,
— allyl alcohol,
— crotenaldehyde,
— picolene,
— denatonium benzoate,
— methyl alcohol.

▼M8

The Czech Republic

Per hectolitre of pure alcohol:

1. — 1 gram denatonium benzoate,

   — 0,2 litres thiophene,

   — 1 litre methylethylketone (butanone), and

   — 0,2 grams methylene blue (CI basic blue 52015);

2. — 0,4 litres solvent naphtha,

   — 0,2 litres kerosine, and

   — 0,1 litres technical petrol;

3. — 3 litres ethyl tert-butyl ether (ETBE), CAS: 637-92-3,

   — 1 litre isopropyl alcohol (IPA), CAS: 67-63-0,

   — 1,0 litres unleaded petrol (BA 95 Natural), CAS: 86290-81-5,

   — 10 miligrams fluorescein, CAS: 2321-07-05.

▼M4

Estonia

Per hectolitre of ethyl alcohol:

1. 2 litres methylethylketone and 3 litres methylisobutylketone;

2. 2 litres acetone and 3 litres methylisobutylketone;

3. 3 litres acetone and 2 grams of denatonium benzoate.

Hungary

Alcoholic products qualify as denatured alcohol (produced by denaturing), if it contains, by reference to its pure ethyl alcohol quantity, at least:

(a) 2 % by weight of methyl-ethyl-ketone, 3 % by weight of methyl-isobuthyl-ketone and 0,001 % by weight of denatonium benzoate;

or

(b) 1 % by weight of methyl-ethyl-ketone and 0,001 % by weight of denatonium-benzoate;

or

(c) 2 % by weight of isopropyl-alcohol, 1 % by weight of t-butyl alcohol, and 0,001 % by weight of denatonium-benzoate;

and its alcoholic strength by volume is not less than 92 % vol.

Only chemicals can qualify as denaturing chemicals if their quality is certified with analysis certificates.

▼M8

Latvia

Minimum amount per 100 litres of spirit:

1. mix of following substances:

   — isopropyl alcohol 9 litres,

   — acetone 1 litre,

   — methylene blue or thymol blue or crystallic violet 0,4 grams;

▼M8

2. mix of following substances:

— methylethylketone 2 litres,

— methylisobutylketone 3 litres;

3. mix of following substances:

— acetone 3 litres,

— denatonium benzoate 2 grams;

4. ethyl acetate 10 litres.

Minimum amount per 100 litres of dehydrated ethyl alcohol (containing maximum 0,5 % of water):

1. benzine or petroleum minimum 5 litres and maximum 7 litres.

▼M4

Lithuania

Kind (sort) of ethyl alcohol	Denaturants	Amount of the denaturants, per hectolitre pure alcohol
Ethyl alcohol or aldehyde fraction of ethyl alcohol, or distilled aldehyde fraction of ethyl alcohol	Acetone and denatonium benzoate	3 litres 2 grams

Malta

Mineralised methylated spirits

Base:

90 % vol. ethanol,

9,5 % vol. wood naptha, and

0,5 % vol. crude pyridine.

To each 1 000 litres of which is added:

— 3,75 litres of mineral naptha (petroleum oil), and

— 1,50 ppm of methyl violet.

Poland

Per hectolitre pure alcohol:

1. 0,75 litre methylethylketone, consisting of:

— 95 to 96 % by weight of methylethylketone,

— 2,5 to 3 % by weight of methylisopropylketone,

— 1,5 to 2 % by weight of ethylisoamylketone (5-methyl-3-heptanone),

together with 0,25 litres of pyridine bases;

2. one litre methylethylketone, consisting of:

— 95 to 96 % by weight of methylethylketone,

— 2,5 to 3 % by weight of methylisopropylketone,

— 1,5 to 2 % by weight of ethylisoamylketone (5-methyl-3-heptanone),

together with 1 gram denatonium benzoate.

Slovakia

Per one hectolitre pure alcohol (1 hl a.) add:

(a) 2 litres of methylethylketone,

3 litres of methylisobutylketone,

▼M4

1 gram of denatonium benzoate, and

0,2 grams methylene blue;

(b) 1,5 litres of technical petrol (special spirit),

1,5 litres of kerosene, and

2 grams of denatonium benzoate.

Hectolitre pure alcohol (hl a.) is alcohol at the temperature of 20 °C.

Slovenia

Per hectolitre of pure ethyl alcohol:

— 1 580 grams isopropyl alcohol, and

— 790 grams tert-butyl alcohol, and

— 0,79 grams denatonium benzoate.

▼M6

Bulgaria

For complete denaturing of ethyl alcohol the following substances in the mentioned quantities are to be added together to 100 litres of ethyl alcohol with a minimum actual alcohol content of 90 % vol:

— 5 litres methylethylketone;

— 2 litres isopropyl alcohol;

— 0,2 grams methylene blue.

Romania

Per hectolitre of pure alcohol:

— 1 gram denatonium benzoate,

— 2 litres methylethylketone (butanone), and

— 0,2 grams methylene blue.