COMMISSION IMPLEMENTING REGULATION (EU) No 162/2013
of 21 February 2013
amending the Annex to Regulation (EC) No 3199/93 on the mutual recognition of procedures for the complete denaturing of alcohol for the purposes of exemption from excise duty

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

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,

Whereas:

(1) 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.

(2) 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 (2) provides that 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 to be described in the Annex to that Regulation.

(3) The proliferation of denaturing procedures adds complexity to the denaturing system, weakens the ability for effective administration of the system, and offers more opportunities for fraud.

(4) In 2008, Member States provided wide support for a project group operating under Decision No 1482/2007/EC of the European Parliament and of the Council of 11 December 2007 establishing a Community programme to improve the operation of taxation systems in the internal market (Fiscalis 2013) and repealing Decision No 2235/2002/EC (3), involving a large number of Customs Chemical Laboratories and the Joint Research Centre. The object of the project was to explore the possibility of applying common denaturing procedures (euro-denaturants) for the purposes of completely denaturing alcohol.

(5) The project group suggested, in its final report published in June 2011 that a denaturing procedure consisting of 3 litres of isopropyl alcohol (IPA), 3 litres of methyl ethyl ketone (MEK) and of 1 gram of denatonium benzoate per hectolitre of absolute alcohol, could be considered for adoption as a common denaturing procedure for the purposes of completely denaturing alcohol. One main advantage of that common procedure is that it is likely to replace numerous procedures individual to the various Member States. That procedure should therefore be employed as a procedure common to all Member States for the purposes of completely denaturing alcohol in order to prevent evasion, avoidance and abuse in this area.

(6) Subsequently, each Member State has communicated to the Commission a new list of requirements in accordance with Article 27(3) of Directive 92/83/EEC. Each of those lists referred to the common denaturing procedure and, in some cases, to other existing procedures. As regards existing procedures, certain Member States expressed the wish to maintain them for a transitional period or for a non-specified period of time due to specific technical requirements.

(7) The Commission transmitted all the communications received to the other Member States on 28 June 2012.

(8) None of the Member States objected to the proposed common denaturing procedure.

(9) As regards existing procedures, no new elements have been raised indicating the existence of risk of evasion, avoidance and abuse.

(10) In addition to the common denaturing procedure for the purposes of completely denaturing alcohol, patenting and related cost issues have led Austria to adopt an alternative procedure which is already employed by other Member States as a denaturing procedure.

(11) In order to allow industry adequate time to exhaust stocks of denaturants and denatured products covered so far by Regulation (EC) No 3199/93, but which will no longer be covered once this Regulation becomes applicable, the application of this Regulation as regards Section I of this Annex should be deferred.

Regulation (EC) No 3199/93 should therefore be amended accordingly.

The measures provided for in this Regulation are in accordance with the opinion of the Committee on Excise Duties,

HAS ADOPTED THIS REGULATION:

Article 1

The Annex to Regulation (EC) No 3199/93 is replaced by the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

It shall apply from 1 July 2013.

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

Done at Brussels, 21 February 2013.

For the Commission
The President
José Manuel BARROSO
ANNEX

List of authorised products with their Chemical Abstracts Service (CAS) registered number when available and formulas authorised for the complete denaturing of alcohol:

- **Acetone** CAS: 67-64-1
- **CI reactive red 24** CAS: 70210-20-7
- **Crude pyridine** CAS: not available
- **Crystal violet (C.I. No 42555)** CAS: 548-62-9
- **Denatonium benzoate** CAS: 3734-33-6
- **Ethanol** CAS: 64-17-5
- **Ethyl acetate** CAS: 141-78-6
- **Ethyl sec-amyl ketone** CAS: 541-85-5
- **Ethyl tert-buty1 ether** CAS: 637-92-3
- **Fluorescein** CAS: 2321-07-5
- **Formaldehyde** CAS: 50-00-0
- **Fusel oil** CAS: 8013-75-0
- **Gasoline (including unleaded gasoline)** CAS: 86290-81-5
- **Isopropyl alcohol (IPA)** CAS: 67-63-0
- **Kerosene** CAS: 8008-20-6
- **Lamp oil** CAS: 64742-47-8 to 64742-48-9
- **Methanol** CAS: 67-56-1
- **Methyl ethyl ketone (butanone) (MEK)** CAS: 78-93-3
- **Methyl isobutyl ketone** CAS: 108-10-1
- **Methyl isopropyl ketone** CAS: 563-80-4
- **Methyl violet** CAS: 8004-87-3
- **Methylene blue** CAS: 61-73-4
- **Mineral naphtha** CAS: not available
- **Solvent naphtha** CAS: 8030-30-6
- **Pyridine (or Pyridine bases)** CAS: 110-86-1
- **Spirit of turpentine** CAS: 8006-64-2
- **Technical petrol** CAS: 92045-57-3
- **tert-butyl alcohol** CAS: 75-65-0
- **Thiophene** CAS: 110-02-1
- **Thymol blue** CAS: 76-61-9
- **Wood naphtha** Not available

Synonyms of the authorised products are available in various European languages in the European Customs Inventory of Chemical Substances database.

The term 'absolute ethanol' is used throughout the Annex in conformity with the terminology used by International Union of Pure and Applied Chemistry (IUPAC).

### I. Denaturing procedure employed in all Member States

Per hectolitre of absolute ethanol:

- 3 litres isopropyl alcohol (IPA),
— 3 litres methyl ethyl ketone (MEK),
— 1 gram denatonium benzoate.

Member States, for internal market, are allowed to add a dye to give to the product a characteristic colour, which makes it immediately identifiable.

II. Additional denaturing procedures employed in certain Member States

Czech Republic
Per hectolitre of absolute ethanol, any of the following formulations:

1. — 0.4 litre solvent naphtha,
   — 0.2 litre kerosene,
   — 0.1 litre technical petrol.
2. — 3 litres ethyl tert-butyl ether,
   — 1 litre isopropyl alcohol,
   — 1 litre unleaded gasoline,
   — 10 milligrams fluorescein.

Germany
Per hectolitre of absolute ethanol:

One litre ketone mixture, consisting of:
— 95 % to 96 % by weight of methyl ethyl ketone (MEK),
— 2.5 % to 3 % by weight of methyl isopropyl ketone (3-methyl-2-butanone),
— 1.5 % to 2 % by weight of ethyl sec-amyl ketone (5-methyl – 3 – heptanone),
together with 1 gram denatonium benzoate.

Estonia
Per hectolitre of absolute ethanol:
— 3 litres acetone,
— 2 grams denatonium benzoate.

Ireland
A base is produced by mixing the following:
— 90 % by volume ethanol,
— 9.5 % by volume wood naphtha,
— 0.5 % by volume crude pyridine.

To each 10 hectolitres of the base add:
— 3.75 litres mineral naphtha (petroleum oil),
— 1.5 grams methyl violet.

Note: The wood naphtha and crude pyridine components of the base may be substituted with 10 % by volume of methanol.

Greece
Only low quality alcohol (heads and tails from distillation), with an alcoholic strength of at least 93 % volume and not exceeding 96 % volume can be denatured.

Per hectolitre of hydrated alcohol of 93 % volume the following substances are added:
— 2 litres methanol,
— 1 litre spirit of turpentine,
— 0.50 litre lamp oil,
— 0.40 gram methylene blue.

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

**Italy**

Per hectolitre of absolute ethanol the following is added:
— 125 grams of thiophene,
— 0.8 gram of denatonium benzoate,
— 3 grams of CI reactive red 24 (red colorant), solution at 25 % w/w,
— 2 litres of methyl ethyl ketone (MEK).

The ethyl alcohol to be denatured must have an ethyl alcohol content of at least 83 % by volume and a strength measured on the EC alcoholmeter of at least 90 % by volume.

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.

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.

**Latvia**

1. Per hectolitre of absolute ethanol, any of the following formulations:
   (a) at least:
       — 9 litres isopropyl alcohol,
       — 1 litre acetone,
       — 0.4 gram methylene blue or thymol blue or crystal violet;
   (b) at least:
       — 3 litres methyl isobutyl ketone,
       — 2 litres methyl ethyl ketone (MEK);
   (c) at least:
       — 3 litres acetone,
       — 2 grams denatonium benzoate;
   (d) at least 10 litres ethyl acetate.

2. Per 1 hectolitre of dehydrated ethyl alcohol (containing not more than 0.5 % water):
   Gasoline at minimum 5 litres and maximum 7 litres.

**Lithuania**

Per hectolitre of absolute ethanol:
— 3 litres acetone,
— 2 grams denatonium benzoate.

**Hungary**

Alcoholic products by reference to its pure alcohol quantity, contain at least, one of the following:

(a) 2 % by weight of methyl ethyl ketone (MEK), 3 % by weight of methyl isobutyl ketone and 0.001 % by weight of denatonium benzoate;

(b) 1 % by weight of methyl ethyl ketone (MEK), and 0.001 % by weight of denatonium benzoate;

(c) 2 % by weight of isopropyl alcohol, 1 % by weight of tert-butyl alcohol, and 0.001 % by weight of denatonium benzoate.

**Malta**

A base is produced by mixing the following:
— 90 % by volume ethanol,
— 9.5 % by volume wood naphtha,
— 0.5 % by volume crude pyridine.
To each 10 hectolitres of the base add:
— 3.75 litres mineral naphtha (petroleum oil),
— 1.5 grams methyl violet.

Netherlands
Per hectolitre of absolute ethanol:
Five litres of a mixture consisting of:
— 60 % by volume of methanol,
— 20 % by volume of acetone,
— 11 % by volume of fusel oil (a concentrate of by-products of alcohol distillation),
— 8 % by volume of water,
— 0.5 % by volume of methyl ethyl ketone (MEK),
— 0.5 % by volume of formalin (a watery solution of 37 % by weight of formaldehyde).

Austria
Per hectolitre of absolute ethanol:
One litre ketone mixture, consisting of:
— 95 % to 96 % by weight of methyl ethyl ketone (MEK),
— 2.5 % to 3 % by weight of methyl isopropyl ketone,
— 1.5 % to 2 % by weight of ethyl sec-amyl ketone,
together with 1 gram denatonium benzoate.

Poland
Per hectolitre of absolute ethanol, any of the following formulations:
1. 0.75 litre ketone mixture, consisting of:
   — 95 % to 96 % by weight of methyl ethyl ketone (MEK),
   — 2.5 % to 3 % by weight of methyl isopropyl ketone,
   — 1.5 % to 2 % by weight of ethyl sec-amyl ketone,
together with 0.25 litre of pyridine bases.
2. One litre ketone mixture, consisting of:
   — 95 % to 96 % by weight of methyl ethyl ketone (MEK),
   — 2.5 % to 3 % by weight of methyl isopropyl ketone,
   — 1.5 % to 2 % by weight of ethyl sec-amyl ketone,
together with 1 gram denatonium benzoate.

Romania
Per hectolitre of absolute ethanol:
— 2 litres methyl ethyl ketone (MEK),
— 1 gram denatonium benzoate,
— 0.2 gram methylene blue.

Slovenia
Per hectolitre of absolute ethanol:
— 1 580 grams isopropyl alcohol,
— 790 grams tert-butyl alcohol,
— 0.79 gram denatonium benzoate.

Slovakia

Per hectolitre of absolute ethanol:
1. 3 litres methyl isobutyl ketone,
   2 litres methyl ethyl ketone (MEK),
   1 gram denatonium benzoate,
   0.2 gram methylene blue.
2. 1.5 litres technical petrol,
   1.5 litres kerosene,
   2 grams denatonium benzoate.

Finland

Per hectolitre of absolute ethanol any of the following formulations:
1. 2 litres methyl ethyl ketone (MEK),
   3 litres methyl isobutyl ketone.
2. 2 litres acetone,
   3 litres methyl isobutyl ketone.

Sweden

Per hectolitre of absolute ethanol:
— 3 litres methyl isobutyl ketone,
— 2 litres methyl ethyl ketone (MEK).

United Kingdom

A base is produced by mixing the following:
— 90 % by volume ethanol,
— 9.5 % by volume wood naphtha,
— 0.5 % by volume crude pyridine.

To each 10 hectolitres of the base add:
— 3.75 litres mineral naphtha (petroleum oil),
— 1.5 grams methyl violet (C.I. No 42555).