

HOUSINGS FOR FILTRATION CARTRIDGES

TECHNICAL INFORMATION 1

LEGAL OBLIGATIONS REGARDING THE CE MARKING

Introduction

On the 15th of May, 2014, Directive No 2014/68/EU of the European Parliament – the Pressure Equipment Directive – became law and the following points were established:



1. The Legislation was written so that the level of inspection was in accordance with the risk imposed to health. Thus, there are different classifications of pressure vessel that are depend on the following factors:
 - A. the state of the fluid – gas or liquid;
 - B. the risk of the contents – Group 1 (dangerous fluids) or Group 2 (non-dangerous fluids);
 - C. the maximum allowed pressure in bar (PS);
 - D. the volume of the vessel in liters (V).

The Legislation says that, if the fluid inside the vessel is liquid and it is not dangerous (explosive, toxic, flammable or oxidising), it is classified as a “Group 2 Liquid” and only certain rules apply to our vessels. Appendix 1 to this letter shows the chart which defines these categories depending on the product “PS x V” which depend on the multiple of pressure (PS) in bar and volume (V) in liters.

2. According to the Legislation, CE marking is required ONLY for vessels where the multiple PS x V is greater than 10'000 bar x l (bar liters).

3. Pressure vessels where the multiple PS x V is less than 10'000 bar x l (bar liters), must be designed and manufactured following a correct working procedure regulated by the country where it is constructed.

4. They are allowed free circulation in Europe.

5. They must be accompanied by adequate instructions and must bear markings to allow identification of the manufacturer and working parameters (pressure, temperature, capacity, fluid etc..)

PED Extract – Field of Interest

For clarification, here below you can find a brief extract of the Legislation.

However, for further information we invite you to read the original version of the Legislation.

Please keep in mind that Everblue's filters operate on water at a maximum pressure PS = 10 bar and a maximum temperature TS = 80 °C. Water with these characteristics belongs to Group 2.





Directive 2014/68/EU of the European Parliament and of the Council of 15th May 2014

Article 4

Technical requirements

1. The following pressure equipment shall satisfy the essential safety requirements set out in attachment I:
 - (a) vessels, for:
 - (ii) liquids having a steam pressure at the maximum allowable temperature of not more than 0,5 bar above normal atmospheric pressure (1 013 mbar) within the following limits:
 - for fluids in Group 2 with a pressure PS greater than 10 bar and a product of PS and V greater than 10 000 bar · l, or with a pressure PS greater than 1 000 bar (Annex II, table 4);
2. The following assemblies which include at least a pressure equipment covered by paragraph 1 satisfy the essential safety requirements set out in attachment I:
 - b) assemblies other than those referred to in point (a) (boilers), if the manufacturer intends them to be available on the market and put into service as assemblies.
3. Pressure equipment and assemblies below or equal to the limits set out in points (a), (b) and (c) of paragraph 1 and in paragraph 2 respectively shall be designed and manufactured in compliance with the sound engineering practice of a Member State in order to ensure safe use. Pressure equipment and assemblies shall be accompanied by adequate instructions for use. These equipment and assemblies don't bear the CE marking ref. to Article 18, unless differently stated following Union harmonization legislation Without that allows this.

Article 13

Classification of pressure equipment

1. Pressure equipment referred to in Article 4(1) are classified by category in compliance with attachment II, according to an ascending level of hazard.

In this classification fluids are divided into the following two groups:

- a) group 1 consisting of substances and mixtures, as defined in points (7) and (8) of Article 2 of Regulation (EC) No 1272/2008, that are classified as hazardous in accordance with the following physical or health hazard classes in Parts 2 and 3 of the attachment I of this Regulation:

- (i) unstable explosives or explosives of Divisions 1.1, 1.2, 1.3, 1.4 and 1.5;
- (ii) flammable gases, category 1 and 2;
- (iii) oxidising gases, category 1;
- (iv) flammable liquids, category 1 and 2;
- (v) flammable liquids, category 3 where the maximum allowable temperature is above the flashpoint;
- (vi) flammable solids, category 1 and 2;
- (vii) self-reactive substances and mixtures, type A to F;
- (viii) pyrophoric liquids, category 1;
- (ix) pyrophoric solids, category 1;
- (x) substances and mixtures which in contact with water emit flammable gases, category 1, 2 and 3;
- (xi) oxidising liquids, category 1, 2 and 3;
- (xii) oxidising solids, category 1, 2 and 3;
- (xiii) organic peroxides types A to F;
- (xiv) acute oral toxicity, category 1 and 2;
- (xv) acute dermal toxicity, category 1 and 2;
- (xvi) acute inhalation toxicity, category 1, 2 and 3;
- (xvii) specific target organ toxicity – single exposure, category 1.

Group 1 also includes substances and mixtures contained in pressure equipment with a maximum temperature allowed TS which exceeds the flashpoint of the fluid;

- b) Group 2 consisting of substances and mixtures not referred to in point (a).

Annex 1

Table 4: pressure vessels for Group 2 fluids.

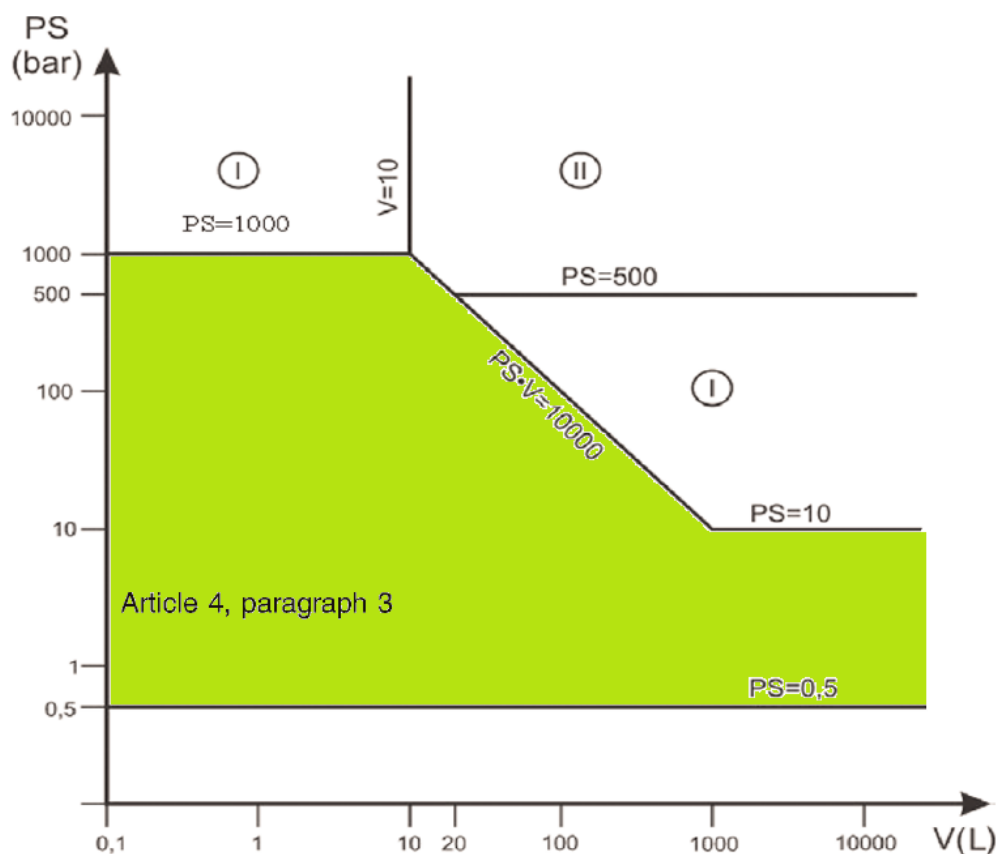


Table 4

Vessels referred to in Article 4(1)(a)(ii), second indent