

SCHEDULE 2

Regulation 2(1)

Essential safety requirements

1.—(1) Each pyrotechnic article must attain the performance characteristics specified by the manufacturer to the notified body in order to ensure maximum safety and reliability.

(2) Each pyrotechnic article must be designed and manufactured in such a way that it can be disposed of safely by a suitable process with minimum effect on the environment.

(3) Each pyrotechnic article must function correctly when used for its intended purpose.

(4) Each pyrotechnic article must be tested under realistic conditions.

(5) If it is not possible to meet the requirement in sub-paragraph (4) in a laboratory, the tests must be carried out in the conditions in which the pyrotechnic article is to be used.

(6) The following information and properties, where applicable, must be considered or tested—

(a) design, construction and characteristic properties, including detailed chemical composition (mass and percentage of substances used) and dimensions;

(b) the physical and chemical stability of the pyrotechnic article in all normal, foreseeable environmental conditions;

(c) sensitivity to normal, foreseeable handling and transportation;

(d) compatibility of all components as regards their chemical stability;

(e) resistance of the pyrotechnic article to moisture where it is intended to be used in humid or wet conditions and where its safety or reliability may be adversely affected by moisture;

(f) resistance to low and high temperatures, where the article is intended to be kept or used at such temperatures and its safety or reliability may be adversely affected by cooling or heating of a component or of the pyrotechnic articles as a whole;

(g) safety features intended to prevent untimely or inadvertent initiation or ignition;

(h) suitable instructions and, where necessary, markings in respect of safe handling, storage, use (including safety distances) and disposal;

(i) the ability of the pyrotechnic article, its wrapping or other components to withstand deterioration under normal, foreseeable storage conditions;

(j) specification of all devices and accessories needed and operating instructions for safe functioning of the pyrotechnic article.

(7) During transportation and normal handling, unless specified by the manufacturer's instructions, the pyrotechnic article must contain the pyrotechnic composition.

(8) Pyrotechnic articles must not contain detonative explosives other than black powder and flash composition, except for pyrotechnic articles of categories P1, P2, T2 and fireworks of category F4 meeting the following conditions—

(a) the detonative explosive cannot be easily extracted from the pyrotechnic article;

(b) for category P1, the pyrotechnic article cannot function in a detonative manner, or cannot, as designed and manufactured, initiate secondary explosives;

(c) for categories F4, T2 and P2, the pyrotechnic article is designed and intended not to function in a detonative manner, or if designed to detonate, it cannot as designed and manufactured initiate secondary explosives.

(9) The various groups of pyrotechnic articles must at least also comply with the following requirements.

Fireworks

2.—(1) The manufacturer must assign fireworks to different categories according to regulation 6 (categorisation), characterised by net explosive content, safety distances, noise level, or similar. The category must be indicated on the label.

(2) For category F1 fireworks, the following conditions must be met—

- (i) the safety distance must be at least 1 metre. However, where appropriate the safety distance may be less;
- (ii) the maximum noise level must not exceed 120 dB (A, imp), or an equivalent noise level as measured by another appropriate method, at the safety distance;
- (iii) the category must not comprise bangers, banger batteries, flash bangers and flash banger batteries;
- (iv) throwdowns must not contain more than 2.5 mg silver fulminate.

(3) For category F2 fireworks, the following conditions must be met—

- (i) the safety distance must be at least 8 metres. However, where appropriate the safety distance may be less;
- (ii) the maximum noise level must not exceed 120 dB (A, imp), or an equivalent noise level as measured by another appropriate method, at the safety distance.

(4) For category F3 fireworks, the following conditions must be met—

- (i) the safety distance must be at least 15 metres. However, where appropriate the safety distance may be less;
- (ii) the maximum noise level must not exceed 120 dB (A, imp), or an equivalent noise level as measured by another appropriate method, at the safety distance.

(5) Fireworks may only be constructed of materials which minimise risk to health, property and the environment from debris.

(6) The method of ignition must be clearly visible or must be indicated by labelling or instructions.

(7) Fireworks must not move in an erratic and unforeseeable manner.

(8) Category F1 fireworks, category F2 fireworks and category F3 fireworks must be protected against inadvertent ignition either by a protective cover, by the packaging or by the construction of the pyrotechnic article.

(9) Category F4 fireworks must be protected against inadvertent ignition by methods specified by the manufacturer.

Other pyrotechnic articles

3.—(1) Pyrotechnic articles must be designed in such a way as to minimise risk to health, property and the environment during normal use.

(2) The method of ignition must be clearly visible or must be indicated by labelling or instructions.

(3) The pyrotechnic article must be designed in such a way as to minimise risk to health, property and the environment from debris when initiated inadvertently.

(4) Where appropriate, the pyrotechnic article must function properly until the “use by” date specified by the manufacturer.

Ignition devices

4.—(1) Ignition devices must be capable of being reliably initiated and be of sufficient initiation capability under all normal, foreseeable conditions of use.

(2) Ignition devices must be protected against electrostatic discharge under normal, foreseeable conditions of storage and use.

(3) Electric igniters must be protected against electromagnetic fields under normal, foreseeable conditions of storage and use.

(4) The covering of fuses must be of adequate mechanical strength and adequately protect the explosive filling when exposed to normal, foreseeable mechanical stress.

(5) The parameters for the burning times of fuses must be provided with the pyrotechnic article.

(6) The electrical characteristics of electric igniters must be provided with the pyrotechnic article.

(7) The wires of electric igniters must be sufficiently insulated and must be of sufficient mechanical strength, including the solidity of the link to the igniter, taking account of their intended use.