

PAS 44:2009



BSI Standards Publication

Official identification for cattle – Specification

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Foreword

This Publicly Available Specification (PAS) has been developed by BSI in association with British Cattle Movement Service (BCMS) to provide a specification for identification eartags for cattle. It was sponsored by the Rural Payments Agency (RPA).

NOTE Attention is also drawn to Commission Regulation (EC) No. 911/2004 [1] and the Cattle Identification Regulations 2007 [3].

Acknowledgement is given to the following organizations/experts that were consulted in the development of this specification:

- ALIDMA;
- BSI Product Services;
- Cox Agri;
- Dalton ID Systems Ltd;
- Department for Environment Food and Rural Affairs (DEFRA), Livestock & Livestock Products Hub;
- National Farmers' Union (NFU);
- Northern Ireland Assembly: Department of Agriculture and Rural Development (DARD);
- Scottish Government;
- Veterinary Advisor.
- Welsh Assembly Government for Rural Affairs (WAGRA).

This Publicly Available Specification represents cattle eartags which have been tested to PAS 44:2009, which was enhanced to bring it in line with the existing PAS 66:2005, Official identification eartags for sheep and goats – Specification. After discussion with interested parties it was decided that eartags tested to PAS 44:2002 may still be sold, provided they are clearly marked with PAS 44:2002 and differentiated from PAS 44:2009 eartags both at point of sale and on the Ear Tag Allocation System (ETAS).

This specification is not intended to restrict new developments in design and materials.

Wider comments from other parties were invited by BSI, including BSI Technical Committees. The expert contributions made by the organizations and individuals consulted in the development of this PAS are gratefully acknowledged.

This PAS has been prepared and published by BSI, which retains its ownership and copyright. BSI reserves the right to withdraw or amend this PAS on receipt of authoritative advice that it is appropriate to do so. This PAS will be reviewed at intervals not exceeding two years, and any amendments arising from the review will be published as an amended PAS and publicized in *Update Standards*.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

This Publicly Available Specification (PAS) is not to be regarded as a British Standard. It will be withdrawn upon publication of its content in, or as, a British Standard.

Compliance with a Publicly Available Specification does not in itself confer immunity from legal obligations.

1 Scope

This PAS specifies requirements for the performance and testing of eartags used for the official identification of cattle.

This PAS is not applicable to management tags or electronic components of eartags.

The security aspects considered are those concerned with durability, tamper-evidence and safeguarding against a tag's reusability, materials including plasticity, welfare standards and printing processes including durability of print.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 3900-D10, *ISO 7724-3, Methods of test for paints – Part 3: Determination of colour and colour difference: calculation*

BS EN ISO 4892-3, *Plastics – Methods of exposure to laboratory light sources – Part 3: Fluorescent UV lamps*

BS EN 20105-A02, *ISO 105-A02, Textiles – Tests for colour fastness – Grey scale for assessing change in colour*

3 Terms and definitions

For the purposes of this PAS the following terms and definitions apply.

3.1 primary identification eartag

flag type tag of a specified minimum size and colour, for which minimum size of characters are also specified, whose fitting, to either of a bovine's ears, is compulsory within certain specified time-scales

NOTE Attention is drawn to Article 3 of Commission Regulation (EC) No. 911/2004 [1] and EU Parliament & Council Regulation (EC) No 1760/2000 [2].

3.2 secondary identification eartag

tag whose fitting, to the other ear to which the primary identification eartag is fitted, is compulsory within certain specified time-scales

NOTE 1 The secondary identification eartag may be of a range of materials, models and sizes.

NOTE 2 The secondary identification eartag may be the same design as the primary identification eartag or an approved alternative as covered under Article 4 of Commission Regulation (EC) No. 911/2004 [1]. The eartag may be a one-piece metal tag, or two-piece plastic tag of flag or button design.

3.3 plastic type tag

tag with flag parts made out of a plastic material, but which may have metal inserts or tips

3.4 check digit

digit that allows computer systems to check whether official animal identities have been correctly entered

3.5 male part

part of the identification eartag adapted to penetrate the ear of the animal, to fill a corresponding female part of the eartag and to provide a permanent connection between the two halves of the eartag

3.6 female part

part of the identification eartag hollowed or moulded to receive a corresponding male part

3.7 oblique sealing

sealing whereby the male part of the identification eartag has not been inserted at right angles into the female part

3.8 flag type

plastic identification eartag that resembles in shape a flag or a leaf

NOTE A flag type is also known as a "leaf type".

3.9 button

one of the round parts of a plastic identification eartag that resembles in appearance a button

3.10 dagger type applicator

applicator resembling in style a dagger or hunting knife

3.11 newton (N)

force required to impart, to a mass of 1 kg, an acceleration of 1 m/s²

NOTE 1 Newton is equal to 0.2248 pounds force.

4 General requirements

4.1 Materials

4.1.1 Primary identification eartags shall be plastic type tags.

4.1.2 Secondary identification eartags shall be either plastic type tags or produced from metal.

4.1.3 The welfare of livestock shall be considered when selecting materials to be used in the construction of identification eartags.

4.2 Design and construction

4.2.1 Primary identification eartags and plastic type secondary identification eartags shall consist of two parts, a male part and a female part.

NOTE Welfare considerations should be taken into account whilst designing and constructing the male part, so as to minimize trauma and distress to the animal upon insertion of the identification eartag into the ear. It is recognized that the eartag should be inserted according the manufacturer's instructions.

4.2.2 Secondary identification eartags shall be one-piece metal, two-piece plastic, flag or button type tags.

4.2.3 The nominal size of the major dimensions of the parts of primary identification eartags shall be the same. The nominal size of the major dimensions of the parts of two-piece plastic type secondary identification eartags shall be the same.

4.2.4 Once sealed, the distance between the innermost faces of male and female parts shall be not less than 7 mm.

NOTE For guidance on the insertion of identification eartags into the animal's ear see Annex A.

4.2.5 The colour of primary identification eartags shall be yellow.

NOTE 1 10 E 55 of BS 5252F:1976 is recommended.

NOTE 2 Secondary identification eartags may be any colour.

4.2.6 The edges and corners of identification eartags shall be rounded so as not to injure livestock.

NOTE The design of open end female leaves of identification eartags should allow for displaced tissue to fall away freely once the eartags are sealed.

4.3 Dimensions

Primary identification eartag leaves shall be a minimum of 45 mm long and a minimum of 55 mm wide.

NOTE There is no minimum length or width for secondary identification eartag leaves, although the eartag should be of a size to accommodate the information specified in 6.1.

5 Performance requirements

5.1 General

Fifty yellow identification eartags shall be supplied from which samples will be selected at random and shall meet the requirements specified in 5.2 to 5.6.

NOTE 1 Yellow eartags are deemed to be representative of a manufacturer's range and the most commonly used colour.

NOTE 2 Within Great Britain BCMS will monitor through the Ear Tag Allocation System (ETAS, see 6.1.1) the performance of each approved tag on behalf of the competent authority. Where the performance of a tag gives cause for concern, the manufacturer/supplier will be notified and the tag's official approval may be withdrawn.

NOTE 3 Within Northern Ireland DARD will monitor the performance of manufacturers, suppliers and their products. Where performance gives cause for concern, the manufacturer/supplier will be notified and the official approval of their tags may be withdrawn.

5.2 Resistance to artificial weathering

5.2.1 Identification eartags shall be tested in accordance with BS EN ISO 4892-3 using an exposure chamber fitted with UVA 340 fluorescent tubes, operating continuously for 1 000 h at $(50 \pm 5) ^\circ\text{C}$ and a cycle of 8 h UV and 4 h condensation darkness. The irradiance level of the lamps shall be $0.83 \text{ W/m}^2/\text{nm}$. After exposure, plastics components shall exhibit no detrimental effect to UV light by testing in accordance with 5.3 to 5.6 and the mark shall remain legible.

5.2.2 After artificial weathering the change in colour of the yellow eartags shall be less than ΔE^* of 30 CIELAB units, when measured in accordance with BS 3900-D10, or a grey scale change of less than 1 when measured in accordance with BS EN 20105-A02.