Classification, Labelling and Packaging\(^1\) Obligations Relating to Ammunition

\(^1\) Classification, Labelling and Packaging Regulation (EC) No 1272/2008
Disclaimer

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Executive Summary

The requirements of CLP and REACH are complex for explosive substances and mixtures, pyrotechnic substances and mixtures and explosive and pyrotechnic articles. Whilst there are standard REACH obligations of registration for many explosive substances, CLP also places additional obligations on manufacturers, importers and downstream users of explosives.

Classification, Labelling and Packaging across Europe

All European Countries have adopted the UN Global Harmonised System in one form or another. In the European Union it has been introduced through the Classification, Labelling and Packaging Regulations, and this has also been fully adopted by the EEA countries of Norway, Iceland and Lichtenstein. This document is written around the requirements of EU CLP. Specific issues relating to GB CLP need to be assessed in line with the legislative requirements for Great Britain.

CLP has been retained in GB law, with modifications to address deficiencies arising from the UK’s withdrawal from the EU. The changes are set out in The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 No. 720 as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020, and the legislation will apply in Great Britain (England, Wales and Scotland).

EU CLP will continue to apply in Northern Ireland under the terms of the NI Protocol.

Under GB CLP, the following points should be noted:

- The main duties to classify, label and package substances and mixtures, along with the articles referred to in section 2.1 of Annex I, remain
- HSE becomes the relevant GB CLP Agency overseeing GB CLP functions for substances and mixtures placed on the GB market
- The GB CLP Regulation applies to GB based manufacturers, importers, downstream users and distributors supplying the GB market
- All existing EU harmonised classification and labelling in force on 31 December 2020, are retained in GB as GB mandatory classification and labelling (GB MCL)
- Annex VIII of EU CLP has not been included in GB CLP. The voluntary submission of SDS to the UK National Poisons Information Service replaces the mandatory Poison Centre Notification requirements in EU CLP.

Similar legislation has also been introduced in Switzerland, however, the additional labelling requirements for ammunition has not been included in the Swiss legislation.
Definitions

CLP - Classification, Labelling and Packaging

EU – The 27 Member States of the European Union

EEA – EU Member States and three EFTA states (Iceland, Liechtenstein, and Norway)

EFTA – The European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland)

UK – United Kingdom of Great Britain and Northern Ireland

GB – Great Britain (Comprising England, Wales and Scotland)

NI – Northern Ireland

EU CLP - Classification, Labelling and Packaging Regulation (EC) No 1272/2008 as applicable in the EEA and Northern Ireland

GB CLP - The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 No. 720 applicable in Great Britain

This guidance document has been primarily written around EU CLP. GB readers should ascertain any differences in the differing requirements of GB CLP, and take those into account when using this guidance.
1. General Introduction

1.1. Introduction

The AeroSpace and Defence Industries Association of Europe (ASD) represents the Aeronautics, Space, Security and Defence industries in Europe. ASD’s membership today comprises 18 major European aerospace and defence (A&D) companies and 24 member associations in 18 countries.

ASD provides a single platform for the development of joint positions for the industries it represents. In this context, ASD also gives voice to the industry in matters related to REACH, i.e. Regulation (EC) No. 1907/2006 which concerns the Registration, Evaluation, Authorisation and Restriction of Chemicals in the European Union. REACH aims to improve both the availability of information on chemicals and the risk management associated with those chemicals. ASD also covers aerospace and defence matters concerning CLP, i.e. Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures.

CLP in particular has various specific requirements relating to explosive substances and mixtures, pyrotechnic substances and mixtures and explosive and pyrotechnic articles which have implications and obligations for the defence industry producers of ammunition. The requirements and obligations of CLP (and REACH) for explosive and energetic materials can be more complex than for the ‘traditional’ materials to which the legislation applies.

ASD has therefore developed the present sector specific guidance in order to support the A&D industry in complying with the existing obligations and with the aim to ensure that the objectives of REACH and CLP are achieved in a consistent and pragmatic way.

The specific areas which this ASD guidance covers include:

- CLP Labelling of Ammunition (EU & GB CLP)
- Poison Centre Information Submission (PCIS) for explosives (EU CLP only)
- Classification and Labelling Inventory Notification (EU & GB CLP)
- SDS Requirements for Ammunition. (EU & GB CLP)

To enable understanding, various fonts are used in this guidance as follows:

The general text of this document is written in standard Arial font.

Legislative text is shown in italics.

Legislative points of note are shown in **Bold Arial font**
Interpretation of the legislation is shown in blue font.

1.2. Definitions for Explosive Materials and Ammunition

1.2.1. Energetic Materials and Explosive Materials

This document has been written to provide sector guidance on the applicability of CLP to ammunition. In the context of the document, the wording ‘energetic materials’ is generically used for explosives substances and mixtures, and / or pyrotechnic substances or mixtures.

The wording ‘explosive materials’ is generically used for explosives substances and mixtures, pyrotechnic substances or mixtures and explosive and pyrotechnic articles as further defined in Section 1.2.4.

1.2.2. Ammunition

Ammunition refers to materials which can be fired, dropped or scattered from a weapon so as to produce an effect on a target by the application of force. Many, but not all natures of ammunition contain energetic materials. Ammunition designed for training purposes may contain some or no energetic materials.

Ammunition usually is a complex object containing various sub-assemblies which may themselves be considered as ‘ammunition’. The following ammunition sub-assemblies can normally be identified in the make up of ammunition, but there are a wide range of ammunition types which may include other sub-assembly objects or omit those identified below.
Figure 1 Ammunition Examples

Fuze – the object which initiates the explosive train within the ammunition to detonate the main explosive filling.

Projectile – the object which is fired or dropped from a weapon, containing the main explosive charge which provides the chemical energy to defeat a target.

Shot – a projectile object which may contain no energetic materials, relying on its kinetic energy to defeat a target.

Propelling Charge – the object which when burned within the chamber of a weapon produces high pressure gases to fire a projectile from the weapon.

Primer – an object used to initiate the explosive train within the ammunition to ignite a propellant charge.

Warhead – the object within a missile containing the main explosive charge which provides the chemical energy to defeat a target.
Further guidance on ammunition natures and sub-assemblies can be found in the sector guidance document produced by GICAT, Status of Ammunition and Components of Ammunition in the REACH Regulation (Version 4 dated December 2020). ²

1.2.3. Objects and Complex Objects

The European Chemicals Agency (ECHA) identifies in its Guidance document on substances in articles (Version 4 June 2017)³ three categories for objects. These are:-

1. Object is a substance or mixture
2. Object consisting of a substance or mixture and an article (or article containing a substance or mixture)
3. Object is an article (or article with integral substance or mixture).

The ECHA guidance also includes an assessment method to determine whether borderline case objects (which may themselves be assemblies of articles) are articles containing a substance or mixture, or articles with integral substance or mixture.

The definitions of a substance, a mixture and an article are contained within Article 3 of the REACH legal text.

The concept of a ‘complex object’ was introduced following the European Court of Justice judgement in case C-106/14, which clarified that the >0.1% w/w Candidate List Substance of Very High Concern declaration applies for every constituent article present in an assembly of articles.

1.2.4. Ammunition in CLP

Ammunition containing any energetic material, comes under the definitions included in Section 2 of Annex I to CLP.

For the purposes of CLP the following definitions for explosive materials shall apply⁴:

An explosive substance or mixture is a solid or liquid substance or mixture of substances which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings. Pyrotechnic substances are included even when they do not evolve gases.

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⁴ CLP Annex 1 Section 2.1.1.2
A pyrotechnic substance or mixture is a substance or mixture of substances designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonative self-sustaining exothermic chemical reactions.

An unstable explosive is an explosive substance or mixture which is thermally unstable and/or too sensitive for normal handling, transport and use.

An explosive article is an article containing one or more explosive substances or mixtures.

A pyrotechnic article is an article containing one or more pyrotechnic substances or mixtures.

An intentional explosive is a substance, mixture or article which is manufactured with a view to producing a practical, explosive or pyrotechnic effect.

ECHA considers the use of the word ‘Article’ in combination with ‘explosive’ and ‘pyrotechnic’ within the CLP Regulations to differ from its stand alone definition under REACH. Under REACH, an article: means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition.

Ammunition Producers should undertake assessments on their products as to whether an explosive object they produce is “an article containing substance or mixture”, or an “article with integral substance or mixture”. This assessment should be done following the process in the ECHA Guidance on requirements for substances in articles.

Additional guidance can also be found in the GICAT Document ‘Status of Ammunition and Components of Ammunition in the REACH Regulation’ (Version 4 dated 18 December 2020) which can be obtained on application to GICAT https://www.gicat.com/.

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5 The ECHA Guidance on the compilation of Safety Data Sheets (November 2015; Reference: ECHA-15-G-07.1-EN), states that: “SDS’s do not have to be provided for articles. Although the SDS format may, for a few specific articles, be used to convey safety information down the supply chain, it is not adapted to most articles.” A footnote to this sentence explains further: ‘Although according to Article 4(8) and Section 2.1 of Annex I of CLP certain objects described in CLP using the word “article” (specifically in the combinations “explosive articles”, “pyrotechnic article” or “substances, mixtures and articles ... ... which are manufactured with a view to producing a practical, explosive or pyrotechnic effect” as defined via point 2.1.1.1 (b) or (c) and 2.1.1.2 of Annex I to CLP) should be classified and labelled according to CLP, the usage of the word “article” in this combined context differs from the stand-alone definition of an “article” both under REACH (Article 3 (3)) and under CLP (Article 2 (9)). For the purposes of REACH these are more likely to be considered as a combination of an article (the container/packaging) and a substance/mixture (see ECHA Guidance on requirements for substances in articles). If appropriate, in such cases the SDS would be supplied for the corresponding substance/mixture.’

6 REACH Article 3 (3)
1.3. **CLP Obligations other than Labelling**

There are potentially obligations for ammunition other than specific labelling. These may include requirements for:

- Poison Centre Information Submissions (EU CLP only)
- Classification & Labelling Inventory
- Requirements for Safety Data Sheets

It is possible that Member State authorities may have divergent views on the applicability of these additional requirements with regard to ammunition. Therefore, these points are taken into account separately in this guidance.

1.4. **Defence Exemptions**

Article 1.4 of the CLP Regulation provides for exemptions from the regulation in specific cases for certain substances and mixtures where necessary in the interests of defence. This exemption also applies to explosive articles and pyrotechnic articles. Member States have to provide for defence exemptions in separate Member State implementing legislation to enable their use.

An exemption could, for example, be requested where Member States consider that the provision of information to support Poison Centre Information Submissions or the Classification and Labelling Inventory could lead to the release of classified information.

Safety Data Sheet obligations are defined in the REACH Regulation which has its own defence exemption.

The European Defence Agency Code of Conduct on REACH defence exemptions can be found on the European Defence Agencies website⁷. Policy on CLP defence exemptions is under development at the time of writing.

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2. Guidance on the CLP Labelling of Ammunition Packaging

Contents
1. Introduction
2. Legislative Details Pertinent to Ammunition and Interpretation
3. CLP Labelling for Ammunition
4. CLP Labelling Size Requirements
5. Small Arms Ammunition Packaging Variants.
6. Legislative Summary

1.5. Introduction

The Classification, Labelling and Packaging Regulation (EC) No 1272/2008 (CLP) requires that explosive and pyrotechnic articles (hereafter called ammunition) have to be labelled as if they were an explosive substance or mixture. This guidance provides for the consistent application of the CLP regulation to the labelling of ammunition packaging.

CLP references the rules on the transport of dangerous goods, which are contained within the ‘European Agreement concerning the International Carriage of Dangerous Goods by Road’ also known as ADR, and also identified in the Regulation as RTDG (Rules for the Transport of Dangerous Goods).

1.5.1. Scope of the requirement covered by this guidance

Where an ammunition contains any explosive content requiring the ammunition to be tested and classified for explosive hazards in accordance with the requirements of the systems in the UN Handbook Regulations for the Transport of Dangerous Goods, Manual of Tests and Criteria, it shall be labelled in accordance with the requirements of CLP for explosive hazard only, irrespective of any of the other chemical content of the ammunition (e.g. CS / tear gas for riot control ammunition; or coloured dyes for position marking ammunition).

It can be construed from Article 4(8) of the Regulation that an explosive article should be treated in the same way as a substance or mixture insofar as, in the case of a substance or mixture, the label would not be applied to the substance or mixture itself, but to the first layer of packaging containing it.
Whilst it is possible to consider the outer layer of an ammunition item to act as a receptacle for the explosives within it, that outer layer’s shape, surface and design enable its primary function, and as such does not meet the requirements of the definition of packaging in CLP or ADR.

It should be noted that for military ammunition, the marking of both ammunition and packaging can be an integral part of the design pack. As such, any change to the marking on the ammunition and packaging will generally require drawing changes which need to be agreed and confirmed by the Defence Agency customer for that ammunition. Where possible, any text requirements on drawings of the CLP labelling should be referenced “to be in compliance with the legal obligations in place at the time”. This is to avoid the need for drawing change when up-dates in the form of ‘Adaptation to Technical Progress’ (ATP) make change to classifications, Hazard Statement and Precautionary Statement necessary.

1.5.2. Definitions & Pack Examples

This guidance assumes the following packaging methodology and definitions.

The definitions are from both the CLP regulations, and from the ADR (see Appendix 1).

- **Package. CLP** - means the complete product of the packing operation, consisting of the packaging and its contents.

- **Packaging CLP & ADR** - means one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions.

- **Intermediate Packaging. CLP & ADR** - a packaging placed between inner packagings or articles, and an outer packaging.

- **Overpack. ADR** - means an enclosure used to contain one or more packages, consolidated into a single unit easier to handle and stow during carriage.

Examples of overpacks (not from ADR):

- A loading tray such as a pallet, on which several packages are placed or stacked and secured by a plastics strip, shrink or stretch wrapping or other appropriate means;

- An outer protective packaging such as a box or a crate

- **Inner Packaging. ADR** - a packaging for which an outer packaging is required for carriage.

1.5.3. Other definitions used for this paper
• **Unpackaged Article.** An item which is classified for transport, without requiring any other transport packaging. Individual unpackaged article items are normally transported and stored within an Overpack.

• **Outer Pack.** The pack, approved for transport as an individual package, containing items within Intermediate or Inner Packs.

• **Single Outer Pack.** The pack, approved for transport as an individual package, containing items which are not otherwise packaged.

1.6. Legislative Details Pertinent to Ammunition and Interpretation

The specific requirements to support the basis of CLP are included in the Preamble to the Regulation. These include the following important paragraphs:

Classification (Para 10)

*The objective of this Regulation should be to determine which properties of substances and mixtures should lead to a classification as hazardous, in order for the hazards of substances and mixtures to be properly identified and communicated. Such properties should include physical hazards as well as hazards to human health and to the environment, including hazards to the ozone layer.*

These are the overall objectives of the CLP Regulation.

Labelling (Para 39 & 50)

(39) *Substances and mixtures classified as hazardous should be labelled and packaged according to their classification, so as to ensure appropriate protection and to provide essential information to their recipients, by drawing their attention to the hazards of the substance or mixture.*

(50) *Rules for the application of labels and the location of information on labels are necessary to ensure that the information on labels can be easily understood.*

These paragraphs provide the reasoning for consistent labelling, and the need for rules to ensure hazards are understood.

Packaging (Para 51)

*This Regulation should set general packaging standards, in order to ensure the safe supply of hazardous substances and mixtures.*

This paragraph stipulates the need for proper packaging to ensure safety in supply.
The rules bringing together the labelling requirements for package types are set out in Article 33 of the regulation, relating to labelling of the applicable outer, inner and single packaging. More detail can be found in the Section 2.3 below.

Explosives and ammunition are normally classified when packaged within a particular pack design, or as unpackaged ammunition, and the classification is only applicable to the explosive materials in that tested pack.

**Article 1 contains important exemptions to the Regulation**

*Article 1 (3)*

Waste as defined in Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste (26) is not a substance, mixture or article within the meaning of Article 2 of this Regulation.

The requirements of CLP labelling do not apply to material declared to be waste and being sent for disposal.

*Article 1 (4)*

Member States may allow for exemptions from this Regulation in specific cases for certain substances or mixtures, where necessary in the interests of defence.

Where necessary in the interests of security or other requirements determined and agreed by the Defence Agency of the Member State, a specific exemption from all or part of the requirements of the CLP Regulation may be granted for a substance or mixture (including explosive and pyrotechnic substances, mixtures and articles).

*Article 1 (6)*

Save where Article 33 Applies this Regulation shall not apply to the transport of dangerous goods by air, sea, road, rail or inland waterways.

Other than where there are specific labelling requirements to comply with CLP, transportation including all loading, carriage and unloading operations being carried out by transport companies under the Transport of Dangerous Goods legislation, is outside the scope of CLP.

Additionally, this Article means that transport of explosives, explosive materials or ammunition to a non-EEA country only requires full ADR labelling. CLP or other labelling may be applied if contractually required by the non-EEA customer. (This is detailed in ECHA Q&A No. 246.) In nearly all countries, regulations will be in place governing the packaging and labelling of explosive materials.
The labelling requirements relating to transportation of explosives, explosive materials or ammunition within the EEA are dependent on where and to whom the transfer of materials is being made, as shown below.

Figure 2 Labelling Requirements for Intra and Inter Site Transport between various Legal Entities

- If you are transporting explosives, explosive materials or ammunition from one site to another site within the EEA (where that is for delivery to another legal entity), full CLP and ADR labelling is required.
- If you are transporting explosives, explosive materials or ammunition from one site to another site within the EEA (where that is for delivery to the same legal entity), only full ADR labelling is required. However, CLP labelling may be included as good practice on a voluntary basis.
- If you are transporting explosives, explosive materials or ammunition within the same site within the EEA to a different legal entity, full CLP is required.
- If you are transporting explosives, explosive materials or ammunition within the same site and legal entity, neither CLP nor ADR labelling is required.
The requirements for the labelling of ammunition in accordance with CLP arise from Articles 3 and 4(8)

Article 3

Hazardous substances and mixtures and specification of hazard classes

A substance or a mixture fulfilling the criteria relating to physical hazards, health hazards or environmental hazards, laid down in Parts 2 to 5 of Annex I is hazardous and shall be classified in relation to the respective hazard classes provided for in that Annex.

Where, in Annex I, hazard classes are differentiated on the basis of the route of exposure or the nature of the effects, the substance or mixture shall be classified in accordance with such differentiation.

The rules for the labelling of explosives are included in Part 2.1 of Annex I, and explosive materials shall be classified within the criteria identified in the Annex. (But see also Annex 1 Section 1.3.5 which specifies explosives and ammunition are to be labelled relating to their physical hazard only.)

Article 4

General obligations to classify, label and package

8. For the purposes of this Regulation, the articles referred to in section 2.1 of Annex I shall be classified, labelled and packaged in accordance with the rules for substances and mixtures before being placed on the market.

Explosive articles shall be labelled as if it was an explosive substance or mixture. Because of the physical (explosive) hazard of ammunition even if they are ‘articles’, they shall be classified for explosive hazards in accordance with the requirements of the systems in the UN Handbook Regulations for the Transport of Dangerous Goods, Manual of Tests and Criteria; labelled in accordance with the special requirements for explosives under CLP (Section 2 of Annex I), and comply with the requirements for labelling when packaged.

In addition, there are a number of other Articles in the legislation, both specific to ammunition and non-specific which relate to the method in which ammunition is to be marked. In particular, Annex 1 Part 2.1 (included in Appendix 2) identifies the specific labelling requirements for the various hazard divisions.

The rules on labelling, label requirements and exceptions are covered in a number of Articles in the regulation.

Article 17

General rules

1. A substance or mixture classified as hazardous and contained in packaging shall bear a label including the following elements:
(a) the name, address and telephone number of the supplier(s);
(b) the nominal quantity of the substance or mixture in the package made available to the general public, unless this quantity is specified elsewhere on the package;
(c) product identifiers as specified in Article 18;
(d) where applicable, hazard pictograms in accordance with Article 19;
(e) where applicable, signal words in accordance with Article 20;
(f) where applicable, hazard statements in accordance with Article 21;
(g) where applicable, the appropriate precautionary statements in accordance with Article 22;
(h) where applicable, a section for supplemental information in accordance with Article 25.

2. The label shall be written in the official language(s) of the Member State(s) where the substance or mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.

Suppliers may use more languages on their labels than those required by the Member States, provided that the same details appear in all languages used.

This identifies that substances and mixtures (including explosive materials of all types) classified as being hazardous shall be labelled, and provides for the general requirements for the contents of the label which shall be applied to the package, and the requirement for languages on the label.

Annex VIII, Part 2, Section 2.2

This Annex shall not apply to mixtures for scientific research and development and to mixtures for product and process oriented research and development as defined in Article 3(22) of Regulation (EC) No 1907/2006.

This Annex shall not apply to mixtures classified only for one or more of the following hazards:
(1) gases under pressure;
(2) explosives (unstable explosives and Divisions 1.1 to 1.6)

Explosive mixtures are excluded from the requirement to include a Unique Formula Identifier (UFI) in the Supplemental Information according to Section 2.2, Part A, Annex VIII if they are only classified as explosives and have no health classification.

Article 19 (2)

2. Subject to Article 33, hazard pictograms shall fulfil the requirements laid down in section 1.2.1 of Annex I and in Annex V.
This Article relates to the dimensions of the label (See Table 1, Section 2.4), and specifies the pictograms to be used.

**Article 23**

*Derogations from labelling requirements for special cases*

The specific provisions on labelling laid down in section 1.3 of Annex I shall apply in respect of the following:

*(e)* explosives, as referred to in section 2.1 of Annex I, placed on the market with a view to obtaining an explosive or pyrotechnic effect;

Annex 1.3.5 provides specific instruction on the labelling of explosives and explosive articles.

**1.3.5. Explosives placed on the market with a view to obtaining an explosive or pyrotechnic effect**

Explosives, as referred to in section 2.1, placed on the market with a view to obtaining an explosive or pyrotechnic effect shall be labelled and packaged in accordance with the requirements for explosives only.

This means that, where an ammunition contains any explosive content, the labelling shall only include the requirements in Annex 1 Section 2.1 relating to physical (i.e., explosive) hazard only, and not for health or environmental hazards, irrespective of any of the other chemical content of the ammunition (e.g. CS / tear gas for riot control ammunition; or coloured dyes for position marking ammunition).

**Article 29**

*Exemptions from labelling and packaging requirements*

1. Where the packaging of a substance or a mixture is either in such a shape or form or is so small that it is impossible to meet the requirements of Article 31 for a label in the languages of the Member State in which the substance or mixture is placed on the market, the label elements in accordance with the first subparagraph of Article 17(2) shall be provided in accordance with section 1.5.1 of Annex I.

The exemptions in Article 29 and Annex 1.5.1 provide for various means of the provision of labels.

**1.5. Exemptions from labelling and packaging requirements**

1.5.1. Exemptions from Article 31 [(Article 29(1))]

1.5.1.1. Where Article 29(1) applies, the label elements mentioned in Article 17 may be provided in one of the following ways:

(a) in fold-out labels; or

(b) on tie-on tags; or
(c) on an outer packaging.

1.5.1.2. The label on any inner packaging shall contain at least hazard pictograms, the product identifier referred to in Article 18 and name and telephone number of the supplier of the substance or mixture.

This identifies alternative means of providing labelling, and the minimum labelling on inner packages where size of the pack prevents full labelling in accordance with Article 17. For example, the Product Identifiers in Article 18 refer to substance names and identifiers (e.g. CAS numbers) or for mixtures, trade names or designations can be used, together with listed substances of principle hazard in the mixture.

Article 31

General rules for the application of labels

1. Labels shall be firmly affixed to one or more surfaces of the packaging immediately containing the substance or mixture and shall be readable horizontally when the package is set down normally.

2. The colour and presentation of any label shall be such that the hazard pictogram stands out clearly.

3. The label elements referred to in Article 17(1) shall be clearly and indelibly marked. They shall stand out clearly from the background and be of such size and spacing as to be easily read.

4. The shape, colour and the size of a hazard pictogram as well as the dimensions of the label shall be as set out in section 1.2.1 of Annex I.

5. A label shall not be required when the label elements referred to in Article 17(1) are shown clearly on the packaging itself. In such cases, the requirements of this Chapter applicable to a label shall be applied to the information shown on the packaging.

This article identifies the general rules for the application of labels. In accordance with Article 4(8) which requires explosive and pyrotechnic articles to be labelled as if they are substances or mixtures, Article 31 (1) identifies that the label shall be affixed to the packaging immediately containing an explosive or pyrotechnic substance, mixture or article. Label elements may be printed directly onto the packaging.

Article 32

Location of information on the label

1. The hazard pictograms, signal word, hazard statements and precautionary statements shall be located together on the label.

2. The supplier may decide the order of the hazard statements on the label. However, subject to paragraph 4, all hazard statements shall be grouped on the label by language.

The supplier may decide the order of the precautionary statements on the label. However, subject to paragraph 4, all precautionary statements shall be grouped on the label by language.
3. Groups of hazard statements and groups of precautionary statements referred to in paragraph 2 shall be located together on the label by language.

4. The supplemental information shall be placed in the supplemental information section referred to in Article 25, and shall be located with the other label elements specified in Article 17(1)(a) to (g).

5. In addition to its use in hazard pictograms, colour may be used on other areas of the label to implement special labelling requirements.

6. Label elements resulting from the requirements provided for in other Community acts shall be placed in the section for supplemental information on the label referred to in Article 25.

This identifies that languages must be grouped together. For explosive items, the order of hazard and precautionary statements is identified in Annex 1 Section 2.1. (See Annex 3 of this document.)

Article 33

Specific rules for labelling of outer packaging, inner packaging and single packaging

This is an important article in relation to packaging markings for ammunition. Further details and interpretation are included in Section 2.3.

1. Where a package consists of an outer and an inner packaging, together with any intermediate packaging, and the outer packaging meets labelling provisions in accordance with the rules on the transport of dangerous goods, the inner and any intermediate packaging shall be labelled in accordance with this Regulation. The outer packaging may also be labelled in accordance with this Regulation. Where the hazard pictogram(s) required by this Regulation relate to the same hazard as in the rules for the transport of dangerous goods, the hazard pictogram(s) required by this Regulation need not appear on the outer packaging.

Where a package consists of an outer, inner and intermediate packaging, the inner and intermediate packaging shall be labelled in accordance with CLP. The outer package shall be labelled in accordance with ADR to meet the labelling provisions to transport it. The outer package may also be labelled in accordance with CLP, but if the hazard pictogram used for ADR relates to the same hazard as CLP as shown in the equivalence diagram below, the CLP pictogram does not need to be applied.

![Figure 3 CLP Pictogram equivalency to ADR Pictogram for Explosives](image-url)
2. Where the outer packaging of a package is not required to meet labelling provisions in accordance with rules on the transport of dangerous goods, both the outer and any inner packaging, including any intermediate packaging, shall be labelled in accordance with this Regulation. However, if the outer packaging permits the inner or intermediate packaging labelling to be clearly seen, the outer packaging need not be labelled.

Where the outer package does not need to be labelled in accordance with ADR, it must be labelled in accordance with CLP on outer and all inner packages. (Ammunition has always to be labelled according to ADR rules; this case therefore usually should never arise when dealing with ammunition.)

3. Single packages that meet the labelling provisions in accordance with the rules on the transport of dangerous goods shall be labelled both in accordance with this Regulation and the rules on the transport of dangerous goods. Where the hazard pictogram(s) required by this Regulation relate to the same hazard as in rules on the transport of dangerous goods, the hazard pictogram(s) required by this Regulation need not appear.

Where a package does not contain inner or intermediate packaging it shall be labelled in accordance with both ADR and CLP. If the hazard pictogram used for ADR relates to the same hazard as CLP, the CLP pictogram does not need to be applied.

Article 61 (4) (Text not included.)

This article provided for Transition dates to minimise disruption in the supply chain. Substances and mixtures which were already in the supply chain when the CLP labelling requirements became applicable could continue to be placed on the market until the Transition dates, after which they had to be re-labelled. The last of these Transition dates expired in 2017.

This has certain implications for ammunition produced, packaged and labelled before the introduction of CLP. This can be summarised as follows.

1) Explosive and Pyrotechnic articles do not have to be re-labelled with a CLP label if they are being used (or held in storage for future use) solely by the same legal entity (company or Defence Agency) who has them currently in its possession. This applies if munitions are taken out of storage for use by that same legal entity. For example, CLP labelling is not necessary if ammunition is transported from one production site to another if both production sites are part of the same legal entity.

2) Explosive and Pyrotechnic articles labelled before the introduction of CLP, must be re-labelled with a CLP label before they are placed on the market. Placing on the market means supplying or making available, whether in return for a payment or free of charge, to a third party within
the EU. This applies to both companies and Defence Agencies who wish to place ammunition on the market (i.e., making it available to employees of a third party) in the EU.

3) CLP labelling is not required if the ammunition is made directly available to a third party outside of the EU (since there is no “placing on the market” in the EU), however, labelling in full compliance with the requirements of ADR (and any other local regulation of the non-EU third party) is necessary.

4) Explosive and Pyrotechnic articles labelled before the introduction of CLP do not have to be re-labelled if they are declared as being at the end of their useful life and require to be transported for disposal. Such life expired ammunition can be identified as ‘Waste’ under Directive 2006/12/EC Annex 1 Category 3 (i.e., as being ‘Products whose date for appropriate use has expired.’) Labelling in accordance with ADR is required to transport the expired ammunition items to the dismantler/disposal point.

1.7. CLP Labelling for Ammunition

The CLP labelling requirements below apply to all natures of ammunition placed on the market.

The diagrams below identify the generic requirements for labelling of ammunition for transport between different legal entities on different sites. They include the main ADR, UN and CLP markings which are required at each level of packaging.

CLP Information in different languages must be grouped together and show the same information.

Not all the shown information will be required for all instances, and optional information at each level is shown in italic font.

Certain information, including Product Identifier, Division 1.X, Quantity, NEQ, Gross Weight, Dimensions, Volume, Proper Shipping Name, and UN No. does not need to appear on the CLP label if they appear elsewhere on the package markings at that level of application.

Any national requirements specific to Member States, or contractual requirements will be additional to the labelling elements shown, and are not included in these drawings.

The correct labelling requirements must be identified by the packer on a case-by-case basis.

On Unpackaged Ammunition.

Generally the term ‘unpackaged ammunition’ relates to ammunition of a size where the individual packaging to contain the ammunition item is impractical, such as for large calibre projectiles and aircraft bombs. Such ammunition is normally transported in an Over-pack, i.e. as a palletised item. If the Member State permits, the unpackaged ammunition item itself does not need to be labelled in accordance with
CLP. In such case, if the unpackaged ammunition itself is not CLP labelled, the Overpack must always be labelled according to CLP.

Figure 4 Unpackaged ammunition in Over-pack
On Overpack Label.

The Overpack Label must include the following required CLP label elements: the Signal Word, Hazard Statement and Precautionary Statements. (Note that the CLP pictogram may be omitted if the ADR pictogram represents the same hazard.) The format of the label may be black text on white background, suitable for laser printing on suitably sized paper, or other formats as required. The CLP markings are one element additional to the ADR and address elements included on the label. These other elements must meet the requirements of ADR. (E.g. the HD 1 orange label must be a minimum size 100mm x 100mm.)

![Over-pack (CLP & ADR)](image)

**Figure 5 Packaged ammunition in Over-pack**
On Outer Pack

Outer Pack containing Inner Packages.

The Outer Pack markings need to be in accordance with ADR only. CLP labelling may be applied as good practice, but this is not mandatory.

*Figure 6 Outer Pack containing Inner Packages*
**Single Outer Pack (I.e. an outer pack with no inner packaging).**

Markings have to be in accordance with ADR together with a CLP label including the Signal Word, Hazard Statement and Precautionary Statements only. (The CLP pictogram may be omitted if the ADR pictogram represents the same hazard.) CLP Label elements may be black text on white background, or may be printed in any colour scheme or method required by the customer.

### Single Outer Pack (CLP & ADR)

<table>
<thead>
<tr>
<th>Product Identifier</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEQ = X.Xkg</td>
<td>Language 1</td>
</tr>
<tr>
<td></td>
<td>Signal Word Division 1.X</td>
</tr>
<tr>
<td></td>
<td>Hazard statements</td>
</tr>
<tr>
<td></td>
<td>Precautionary statements</td>
</tr>
<tr>
<td></td>
<td>Supplementary information</td>
</tr>
<tr>
<td>Consignor / Consignee Address</td>
<td>Language 2</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>Signal Word Division 1.X</td>
</tr>
<tr>
<td>Supplier Name, Address &amp; Telephone No.</td>
<td>Hazard statements</td>
</tr>
<tr>
<td></td>
<td>Precautionary statements</td>
</tr>
<tr>
<td></td>
<td>Supplementary information</td>
</tr>
</tbody>
</table>

*Figure 7 Single Outer Pack*
On Intermediate or Inner Packs

All Intermediate and Inner Packaging is to include all required CLP Label Elements, including the pictogram. CLP Label elements may be black text on white background. The pictogram shall have a red outline. The label may be printed onto the pack material, or be a separate label stuck onto the pack or any of the alternatives identified in CLP Annex 1 Para 1.5.1.1.

![Intermediate and Inner Pack (CLP)](image)

**Figure 8 Intermediate or Inner Packs**

On pack options where ammunition is pre-loaded to a tactical container.

In the case of ammunition provided to the user pre-loaded into tactically deployable bags or containers which are designed not to be highly visible (“camouflage colouring”), or where the visibility of the CLP labelling of those bags or containers could place the user in additional danger when deployed, the receiving Ministry of Defence should be requested to grant a defence exemption on the basis of Article 1 (3) CLP from the labelling requirement - either to omit the CLP label entirely, or to permit a low visibility CLP label using alternative colours to those specified in the legislation.
1.8. **CLP Labelling Size Requirements**

As far as practicable, CLP labels need to follow the requirements of Articles 19 (2), and Annex 1, Para 1.2.1 of the legislation as shown in Table 1.

**Table 1 CLP Labelling Size Requirements**

<table>
<thead>
<tr>
<th>Volume / Capacity of the package</th>
<th>Dimensions of the label (in millimetres) for the information required by Article 17</th>
<th>Dimensions of each pictogram. (in millimetres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not exceeding 3 litres:</td>
<td>If possible, at least 52 × 74</td>
<td>Not smaller than 10 × 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If possible, at least 16 × 16</td>
</tr>
<tr>
<td>Greater than 3 litres but not exceeding 50 litres:</td>
<td>At least 74 × 105</td>
<td>At least 23 × 23</td>
</tr>
<tr>
<td>Greater than 50 litres but not exceeding 500 litres:</td>
<td>At least 105 × 148</td>
<td>At least 32 × 32</td>
</tr>
<tr>
<td>Greater than 500 litres:</td>
<td>At least 148 × 210</td>
<td>At least 46 × 46</td>
</tr>
</tbody>
</table>

Where the size of an inner package is so small as to preclude the minimum recommended sizes, the label shall include a pictogram no smaller than 10mm x 10mm. Each hazard pictogram shall cover at least one fifteenth of the surface area of the label. Text in the required languages may be the smallest size which can be accommodated on the label, including the Signal Word which may be printed in bold font; Hazard and Precautionary statements are to be grouped by language. The language identifier, if such is included, may also be printed in bold font.
1.9. **Small Arms Ammunition Packaging Variants**

Small Arms Ammunition packaging may vary considerably depending on the requirements of the customer and weapon in which it will be used. Examples of such packaging, together with possible labelling options, include:

- **Linked ammunition** – should be considered as being packed in a Single Outer Pack.

- **Bandolier option** – to be considered as being packed in a Single Outer Pack. (The bandolier is a means to carry ammunition in a tactical situation. In this use, the bandolier is pre-filled with ammunition to enable the soldier to rapidly deploy and carry in theatre or when training. The bandolier could be issued separately to be filled by the soldier. Preloading the bandolier and supplying as such is a delivery option for the ammunition. High visibility CLP markings on the bandolier is detrimental to soldier safety, and as such is very undesirable.)

- **Magazine option** - to be considered as being packed in a Single Outer Pack. (The magazine is a means to carry ammunition in a tactical situation. In this use, the magazine is pre-filled with ammunition to enable the soldier to rapidly deploy and carry in theatre or when training. The magazine could be issued separately to be filled by the soldier. Preloading the magazine and supplying as such is a delivery option for the ammunition. High visibility CLP markings on the magazine is detrimental to soldier safety, and as such is very undesirable.)

- **Film-wrap** – to be considered as Intermediate Packaging, and requires all CLP elements including the pictogram on the Film-wrap. This would be packed into an Outer pack which would not require CLP labelling (ADR labelling only).

- **Carton** - to be considered as Inner Packaging, and requires all CLP elements including the pictogram on the carton. This would be packed into an Outer pack which would not require CLP labelling (ADR labelling only).

- **Other Packages** - for any other alternative package types, an assessment should be made to determine what type of pack is being used under the CLP / ADR definition, and the marking requirements for that pack type used.

**Note**

The Bandolier and Magazine options identified above are often provided in camouflage material for a tactical warfighting need. The presence of standard CLP labelling on these items could place the user in additional danger when deployed. Agreement with the receiving Ministry of Defence should be made for the granting of a defence exemption from the labelling requirement, on the basis of Article 1 (3) CLP - either to omit the CLP label entirely, or to permit a low visibility CLP label.
Legislative Summary

The CLP legislation requires that packaged ammunition be labelled to provide information about its physical (i.e. explosive) hazards. There are specific rules relating to the labelling requirements for the different levels of packaging containing ammunition. On all outer packaging where the ADR label represents the same hazard as the CLP label, the CLP pictogram may be omitted.

After 2017, explosive substances, mixtures or articles placed on the market, and labelled in accordance with earlier legislation, have to be re-labelled before being placed on the market. Re-labelling does not apply to materials held in storage, where use will be by the legal entity owner only, or where the ammunition is determined to be waste and is being sent for disposal.

Table 2 CLP Labelling Requirements – Summary Table.

<table>
<thead>
<tr>
<th>Pack Type</th>
<th>Labelling Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overpack</td>
</tr>
<tr>
<td>Overpack (for Packaged or Unpackaged Ammunition)</td>
<td>ADR &amp; CLP*</td>
</tr>
<tr>
<td>Outer Pack</td>
<td></td>
</tr>
<tr>
<td>Single Pack</td>
<td></td>
</tr>
<tr>
<td>Inner Pack</td>
<td></td>
</tr>
<tr>
<td>Intermediate Pack</td>
<td></td>
</tr>
<tr>
<td>Ammunition classified as Unpackaged Ammunition</td>
<td></td>
</tr>
</tbody>
</table>

* Indicates CLP pictogram may be omitted if ADR pictogram represents the same hazard.

** Subject to a defence exemption from the Member State Defence Agency
3. Guidance on Poison Centre Information Submissions in the Context of Explosives and Ammunition

3.1. Introduction

The introduction of Annex VIII to the CLP Regulation relates to obligations on importers and downstream users (including formulators of mixtures) to provide harmonised information to ECHA to enable rapid emergency health response relating to queries from consumers or other users of mixtures due to inappropriate use or accident. These are sometimes known as Poison Centre Information Submissions (PCIS).

Annex VIII of EU CLP was not taken into GB CLP and this section does not apply to GB. It is applicable in NI where EU CLP applies.

3.2. Legislative Details Pertinent to Ammunition and Interpretation

Annex VIII of the CLP regulation states in Section 1.2: Importers and downstream users placing on the market mixtures for professional use, within the meaning of Section 2.4 of Part A of this Annex, shall comply with this Annex from 1 January 2021.

Section 2.2, second part, reads: This Annex shall not apply to mixtures classified only for one or more of the following hazards: (1) gases under pressure; (2) explosives (unstable explosives and Divisions 1.1 to 1.6)

The legislation for the provision of Poison Centre Information Submissions came into effect for mixtures to be used for Professional use from January 2021. There are other dates for mixtures for Consumer use and industrial use. The Annex is not applicable for mixtures that are classified only as explosives, but are applicable if the explosive mixture also has health hazards.

Applicability of the Legislation

A) Annex VIII specifically relates to the obligations in the provision of information for MIXTURES. Annex VIII does not apply to substances. There are no references to substances in Annex VIII. Para 3.3 in the ECHA Guidance\(^8\) states that substances, whether classified or not, are excluded from submission obligations.

\(^8\) Guidance on harmonised information relating to emergency health response – Annex VIII to CLP (July 2019, Reference: ECHA-19-G-04-EN)
B) Para 2.2 of Annex VIII states that the Annex shall not apply to explosives (unstable explosives and Divisions 1.1 to 1.6), if classified only for the explosive hazard.

If an explosive mixture has no health hazards associated, there will be no requirement for a submission. Otherwise, where a mixture has explosive and health hazards associated, then a PCIS will be required under Annex VIII of CLP.

3.3. CLP Annex VIII Submissions for Ammunition

Annex VIII of CLP applies to mixtures being placed on the market ‘for use’ by consumers, professionals or in industry. ‘Use’ is defined further in the ECHA guidance as being based on the concept of end-use. End-use the last step before the end-life of a mixture: before it is emitted into a waste stream, included in an article, or is consumed in a process reaction.

For ammunition which is classified as an article with an integral substance or mixture, the mixtures included in the ammunition are no longer used as such (in the sense of the ‘end-use’ definition) after being included in the ammunition. In other words: when incorporated into the ammunition, these mixtures “cease to exist” separately. They are past their end-use, and therefore the obligation for a PCIS does not apply to ammunition which are classified as articles with integral substances or mixtures.

For ammunition which is classified as a combination of a mixture and an article acting as container, the final ‘use’ of the mixture should be determined on the basis of the function of the ammunition. If the mixture is sealed within the ammunition, and the user will not be exposed to it or its reaction products even during use of the ammunition, then a notification should not be required. However, if the mixture is to be released during the use of the ammunition, or where the user may be exposed to it, a PCIS notification to ECHA will be required.

A submission is never required for a metal or alloy component in an ammunition item that is an article under REACH (e.g. for the bullet casing or projectile containing lead, even though lead is classified as hazardous). In such a component, the substance / alloy will be present only as integral substance in an article within the assembly.

It follows from the above that the requirements for PCIS need to be assessed by the ammunition producer on a case by case basis.

3.4. Summary

Annex VIII relates to the provision of a submission of harmonised information to support Poison Centre Information Submissions for mixtures having physical or health hazards meeting the Criteria of CLP Annex I Parts 2 and 3. It does not relate to:
• substances;
• mixtures having explosive properties only;
• ammunition and ammunition parts which are classified as articles with integral substances or mixtures
• mixtures not having physical or health hazards as defined above.

There is a requirement for a PCIS for an explosive where the explosive is a mixture and has both explosive and health hazards.

Whilst there are certain and very specific exceptions which need to be identified on a case by case basis, there is usually no requirement for the provision of information to cover PCIS under CLP Annex VIII for ammunition in general.
4. Guidance on the Classification & Labelling Inventory in the Context of Explosives and Ammunition

1. Introduction

The Classification and Labelling Inventory is a database which contains the classification and labelling information on notified and registered substances, received from manufacturers and importers. It also includes the list of harmonised classifications and the names of harmonised substances translated in all EU languages. Companies are required to provide this information in their C&L notifications or registration dossiers.

Within Great Britain, all existing EU harmonised classification and labelling in force on 31 December 2020, were retained as the GB Mandatory Classification and Labelling List (GB MCL).

2. Legislative Details Pertinent to Ammunition and Interpretation

CLP Article 1(1(e)) establishing a classification and labelling inventory of substances, which is made up of all notifications, submissions and harmonised classifications and labelling elements referred to in points (c) and (d).

CLP Article 1(1(c)) providing an obligation for manufacturers and importers of substances to notify the Agency of such classifications and label elements if these have not been submitted to the Agency as part of a registration under Regulation (EC) No 1907/2006;

CLP Article 1(1(d)) establishing a list of substances with their harmonised classifications and labelling elements at Community level in Part 3 of Annex VI;

CLP Article 39: This Chapter shall apply to:

(a) substances subject to registration in accordance with Regulation (EC) No 1907/2006;

(b) substances within the scope of Article 1 which meet the criteria for classification as hazardous and are placed on the market either on their own or in a mixture …

CLP Article 40 (1): Any manufacturer or importer… who places on the market a substance referred to in Article 39, shall notify to the Agency the following information in order for it to be included in the inventory …

The information referred to in …… shall not be notified, if it has been submitted to the Agency as part of a registration pursuant to Regulation (EC) No 1907/2006, or if it has already been notified by that notifier.
The legislation establishes a database of harmonised classification and labelling requirements for substances. Manufacturers and Importers have to notify into the Classification and Labelling Inventory certain information on the substances they manufacture or import into the EEA and place on the market (as such, or in a mixture). The obligation lies on the manufacturers, and in certain cases importers, to classify the substances and make notifications.

The C&L inventory obligation is on:

- The Manufacturer or Importer of a substance subject to Registration under REACH (i.e., above 1 ton per year).
- The Manufacturer or Importer of a substance classified as being hazardous (irrespective of quantities meeting registration requirements; i.e. even below 1 ton per year)
- Importers of a mixture containing a substance classified as being hazardous, and present above the concentration limit for reporting.

This obligation applies to

- Importers of ammunition classified as articles which include a substance subject to registration (i.e., articles containing a substance intended to be released under normal or reasonably foreseeable conditions of use and in a quantity greater than 1 Tonne per year) in accordance with Art. 7 (1) REACH).
- Importers of ammunition classified as a combination of a substance/mixture and an article acting as a carrier material or container;
- For mixtures containing a hazardous substance(s) above the threshold concentration, the notification duty only applies to the hazardous substance(s) present.
- However, in all cases above, the C&L notification is not necessary if the same substance has already been registered by the same manufacturer, importer or Only Representative on behalf of a non-EEA Country exporter. Because the final registration deadline for substances above 1 ton per year was in 2018, in most cases, the C&L inventory notification is not usually necessary.

If you are a downstream user who formulates mixtures, a distributor, or a producer of articles with intended release, you do not usually need to notify to the Agency because the notification for the substance(s) used will have happened at an earlier stage in the EU supply chain.

3. Summary

Ammunition producers would not normally need to notify to the C&L Inventory, unless they are importing substances, mixtures or certain specific ammunition types into the EU which meet the notification
requirements above. Otherwise, notification obligations are on the manufacturer or importer of the substance concerned.

Table 3 Summarised C&L Inventory Notification Obligations

<table>
<thead>
<tr>
<th>Role under CLP</th>
<th>Substance &gt;1T/year (Subject to Registration)</th>
<th>Non-Hazardous Substance &lt;1T/year</th>
<th>Hazardous Substance &lt;1T/year</th>
<th>Hazardous Substance in a Mixture (Above its concentration Limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer of substance</td>
<td>Yes – unless included in the Registration for that supply route</td>
<td>No</td>
<td>Yes</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Formulator of Mixture</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Importer*</td>
<td>Yes - unless included in the Registration for that supply route</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note that the obligation can include a substance on its own, a substance in a mixture or a substance in an article with intended release according to Art. 7 (1) REACH.
5. Guidance on the Requirements of Safety Data Sheets for Ammunition

5.1. Introduction

The legal requirements for the provision of a Safety Data Sheet (SDS) mainly derive from REACH, and apply to substances, mixtures, and complex objects classified as an article (acting as carrier material or container) containing a substance / mixture, provided that the substance or mixture meets certain criteria. This includes being classified as hazardous under CLP, or where the substance is persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), or is included in the Candidate List of Substances of Very High Concern (SVHC).

As such, there is no legal requirement to provide an SDS for ammunition types assessed as being ‘articles with integral substance / mixture’. (However, this does not remove the obligation from Article 33 REACH to provide information on safe use where an article within a complex object contains an SVHC in a quantity greater than 0.1% w/w.)

5.2. Legislative Details Pertinent to Ammunition and Interpretation

REACH Article 31 (1) confirms the requirements for safety data sheets

1. The supplier of a substance or a mixture shall provide the recipient of the substance or mixture with a safety data sheet compiled in accordance with Annex II:

(a) where a substance or mixture meets the criteria for classification as hazardous in accordance with Regulation (EC) No 1272/2008; or

(b) where a substance is persistent, bioaccumulative and toxic or very persistent and very bioaccumulative in accordance with the criteria set out in Annex XIII; or

(c) where a substance is included in the list established in accordance with Article 59(1) for reasons other than those referred to in points (a) and (b).

SDS are required for substances and mixtures meeting certain criteria relating to their hazards.

REACH Article 33 (1) confirms the duty to communicate information on substances in articles. In line with the judgement of the European Court of Justice (CJEU) [Case C-106/14] in September 2015, the requirement to communicate >0.1% w/w Candidate List Substance of Very High Concern applies for every constituent article present in an assembly of articles.
1. Any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.

The supplier must provide the recipient with information on any SVHC content above 0.1% in an article, together with sufficient information to allow safe use of the article. The SVHC must be identified.

REACH, Annex II, Para 0.7 states:

Safety data sheets shall also be required for the special cases listed in paragraph 1.3 of Annex I to Regulation (EC) No 1272/2008 for which there are labelling derogations.

CLP Annex I, Para 1.3 includes the statement at Para 1.3.5:

Explosives, as referred to in section 2.1, placed on the market with a view to obtaining an explosive or pyrotechnic effect shall be labelled and packaged in accordance with the requirements for explosives only.

The ECHA Guidance on the compilation of Safety Data Sheets (November 2015; Reference: ECHA-15-G-07.1-EN), states that: ‘SDS’s do not have to be provided for articles. Although the SDS format may, for a few specific articles, be used to convey safety information down the supply chain, it is not adapted to most articles.’

SDS are required for explosive substances, explosive mixtures and objects classified as combinations of a substance / mixture and an article containing explosive substances or mixtures, but are not required for articles with integral explosives.

The SDS (for explosive substances and mixtures) shall include the physical, human health and environmental hazards of the substance or mixture.

For ammunition, the SDS requirement is therefore dependant on the ammunition’s classification:

- For ammunition classified as combination of a substance / mixture and an article acting as carrier material or container, an SDS is required for every substance / mixture in it.
- For ammunition classified as article with integral substances / mixtures, there is no obligation to provide an SDS, whether or not a substance is intended to be released under normal or reasonably foreseeable conditions of use.

5.3. SDS format.
The SDS for an explosive substance or mixture should follow the 16 section format as identified in the REACH Regulation, Article 31 (6). Specific data on the impact, electrostatic and other potential initiatory hazards of the explosive material may be included within Section 16 by the originator, or as a stand alone related document where safety data is required solely for internal use by the recipient business.

If an ammunition producer wishes to provide safety information for ammunition classified as an article with integral substance / mixture using a REACH style “Safety Data Sheet”, it should follow the format as closely as is deemed appropriate for the particular article. The document should contain a statement that it is being provided for an article, and that it does not therefore need to fulfil all the SDS obligations mandatory for a substance or mixture.

For ammunition classified as an article containing a substance or mixture where the article acts as carrier material or container, the SDS obligation is mandatory for each of the individual mixtures and / or substances contained within it. Where no change has been made to a substance or mixture, it is permissible to provide a copy of the manufacturers substance / mixture SDS to satisfy this obligation.

5.4. Legislative Summary

Whilst an SDS is not required for an ammunition object classified as an ‘article with integral substance / mixture’, an SDS will be required to be produced for an explosive substance, an explosive mixture, and an ammunition object classified as an ‘article containing substance / mixture’. A company may issue a voluntary SDS (or document inspired by SDS provisions) for an ammunition article with integral substance / mixture if it considers it will be of benefit to the recipient. This does not remove the obligation to include or issue as a separate document any Article 33 Communication or other safe use instruction for the article.
6. Summary of Requirements

The requirements of CLP and REACH are complex for explosive substances and mixtures, pyrotechnic substances and mixtures and explosive and pyrotechnic articles. Whilst there are standard REACH obligations of registration for many explosive substances, CLP also places additional obligations on manufacturers, importers and downstream users of explosives.

Labelling of explosives has some specific differences from standard labelling obligations. Whilst many explosives have health hazards related to exposure, the principle hazard is of a physical nature due to the potential for death, injury and damage to the surroundings caused by explosion. As such, explosives are only labelled to identify the physical hazard, using the special rules identified in the CLP Regulation.

The requirement for Poison Centre Information Submissions (PCIS) are relatively simple. PCIS do not apply to substances nor to articles with integral mixtures. They also do not apply to explosive mixtures if it has only physical hazards, but they do apply if the explosive mixture has health hazards. They also apply to ammunition where the ammunition is assessed as being an article containing an explosive mixture, and the explosive has health hazards unless exposure to the mixture is prevented by design. PCIS does not apply in GB CLP.

CLP introduces a Classification and Labelling Inventory; a database of harmonised substance classification and labelling requirements. This is called the GB MCL in GB CLP. The obligation for notification of substances subject to registration should not be required, as all registrations of ‘existing & pre-registered’ substances was completed in 2018. There is no obligation to notify non-hazardous substances manufactured or imported below the 1T/year threshold, but there is still an obligation for hazardous substances of any quantity even if under the 1T/year threshold, including explosives. This obligation rests only with the substance manufacturer or importer. It does not rest on a producer of ammunition unless they also act as an importer.

The provision of Safety Data Sheets is required for explosive materials as a substance or mixture, and also where the ammunition is assessed to be a ‘substance or mixture contained in an article’. There is no obligation to provide an SDS for an ‘article with integral substance or mixture’, however from a safety perspective, a Safety Data Sheet broadly based on the format, and adapted to suit the ammunition article, can be provided by the supplier to provide information to the recipient customer.

A summary of the obligations for PCIS and SDS is shown for various scenarios in Table 4.
## CLP and Ammunition – March 2021

Contact: Maria Chiara Detragiache

AerSpace and Defence Industries Association of Europe

Table 4 CLP Annex VIII & SDS Scenarios for Explosives and Ammunition Summary

<table>
<thead>
<tr>
<th>Substances Use</th>
<th>Material Manufactured</th>
<th>For Use</th>
<th>Explosive Item</th>
<th>REACH Requirement</th>
<th>Poison Centre Information Submission</th>
<th>Safety Data Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Substance</td>
<td>Manufacture of Explosive Substance (e.g. TNT)</td>
<td>FAP somewhere else</td>
<td>No</td>
<td>Substance Registration if import / manufacture &gt;1T/year. Comply with controls.</td>
<td>No</td>
<td>Not a mixture.</td>
</tr>
<tr>
<td>Single Substance</td>
<td>Production of Ammunition using Explosive Substance (e.g. TNT)</td>
<td>FAP on same or different site as substance manufacture</td>
<td>Yes</td>
<td>Substance Registration if import / manufacture &gt;1T/year. Comply with controls. Dependant on SIA Classification</td>
<td>No</td>
<td>Substances past End use point.</td>
</tr>
<tr>
<td>Substances in Mixture</td>
<td>Manufacture of Explosive Substances / Formulation of Explosive Mixture (e.g. RDX/TNT)</td>
<td>FAP somewhere else</td>
<td>No</td>
<td>Substance Registration if import / manufacture &gt;1T/year. Comply with controls.</td>
<td>Yes if meets criteria for health Hazards</td>
<td>For Mixture</td>
</tr>
<tr>
<td>Substances in Mixture</td>
<td>Production of Ammunition using Explosive Mixture (e.g. RDX/TNT)</td>
<td>FAP on same or different site as mixture formulation</td>
<td>Yes</td>
<td>Substance Registration if import / manufacture &gt;1T/year. Comply with controls. Dependant on SIA Classification</td>
<td>No</td>
<td>Substances past End use point.</td>
</tr>
<tr>
<td>Single Substance</td>
<td>Manufacture of Non-explosive Substance</td>
<td>FAP somewhere else</td>
<td>No</td>
<td>Substance Registration if import / manufacture &gt;1T/year. Comply with controls.</td>
<td>No</td>
<td>Not a mixture.</td>
</tr>
<tr>
<td>Single Substance</td>
<td>Production of Ammunition using Non-explosive Substance</td>
<td>FAP on same or different site as substance manufacture</td>
<td>No</td>
<td>Substance Registration if import / manufacture &gt;1T/year. Comply with controls. Dependant on SIA Classification</td>
<td>No</td>
<td>Substances past End use point.</td>
</tr>
<tr>
<td>Substances in Mixture</td>
<td>Formulation of Non-explosive Mixture</td>
<td>FAP somewhere else</td>
<td>No</td>
<td>Substance Registration if import / manufacture &gt;1T/year. Comply with controls.</td>
<td>Yes if meets criteria for health Hazards</td>
<td>For Mixture</td>
</tr>
<tr>
<td>Substances in Mixture</td>
<td>Production of Ammunition using Non-explosive Mixture</td>
<td>FAP on same or different site as substance / mixture manufacture</td>
<td>No</td>
<td>Substance Registration if import / manufacture &gt;1T/year. Comply with controls. Dependant on SIA Classification</td>
<td>Mostly No, but should be confirmed on a case by case basis depending on the 'use' stage of the mixture in the item.</td>
<td>Dependant on SIA Classification</td>
</tr>
</tbody>
</table>

FAP = Fill, Assemble and Pack - Production of Ammunition
SIA – Substance in Article
Appendix 1

ADR Definitions

"Inner packaging" means a packaging for which an outer packaging is required for carriage;

"Intermediate packaging" means a packaging placed between inner packagings or articles, and an outer packaging;

"Overpack" means an enclosure used (by a single consignor in the case of radioactive material) to contain one or more packages, consolidated into a single unit easier to handle and stow during carriage;

Examples of overpacks:

(a) A loading tray such as a pallet, on which several packages are placed or stacked and secured by a plastics strip, shrink or stretch wrapping or other appropriate means; or

(b) An outer protective packaging such as a box or a crate;

"Packaging" means one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions.

A full set of ADR definitions can be found at https://adrbook.com/en/2017/ADR/1.2.1
Appendix 2

CLP Annex 1 Section 2.1

(Extracted from the Consolidated version of the CLP Regulations incorporating the 12th Adaptation to Technical Progress published in the Official Journal dated 27 March 2019. Note that Sections 2.1.1 to 2.1.3 only are included here.)

2. PART 2: PHYSICAL HAZARDS

2.1. Explosives

2.1.1. Definitions

2.1.1.1. The class of explosives comprises

(a) explosive substances and mixtures;

(b) explosive articles, except devices containing explosive substances or mixtures in such quantity or of such a character that their inadvertent or accidental ignition or initiation shall not cause any effect external to the device either by projection, fire, smoke, heat or loud noise; and

(c) substances, mixtures and articles not mentioned in points (a) and (b) which are manufactured with a view to producing a practical, explosive or pyrotechnic effect.

2.1.1.2. For the purposes of this Regulation the following definitions shall apply:

An explosive substance or mixture is a solid or liquid substance or mixture of substances which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings. Pyrotechnic substances are included even when they do not evolve gases.

A pyrotechnic substance or mixture is a substance or mixture of substances designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonative self-sustaining exothermic chemical reactions.

An unstable explosive is an explosive substance or mixture which is thermally unstable and/or too sensitive for normal handling, transport and use.

An explosive article is an article containing one or more explosive substances or mixtures.

A pyrotechnic article is an article containing one or more pyrotechnic substances or mixtures.
An intentional explosive is a substance, mixture or article which is manufactured with a view to producing a practical, explosive or pyrotechnic effect.

### 2.1.2. Classification criteria

2.1.2.1. Substances, mixtures and articles of this class are classified as an unstable explosive on the basis of the flowchart in Figure 2.1.2. *(Not included in this extract.*) The test methods are described in Part I of the UN RTDG, Manual of Tests and Criteria.

2.1.2.2. Substances, mixtures and articles of this class, which are not classified as an unstable explosive, shall be assigned to one of the following six divisions depending on the type of hazard they present:

(a) Division 1.1 Substances, mixtures and articles which have a mass explosion hazard (a mass explosion is one which affects almost the entire quantity present virtually instantaneously);

(b) Division 1.2 Substances, mixtures and articles which have a projection hazard but not a mass explosion hazard;

(c) Division 1.3 Substances, mixtures and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard:

   (i) combustion of which gives rise to considerable radiant heat; or
   (ii) which burn one after another, producing minor blast or projection effects or both;

(d) Division 1.4 Substances, mixtures and articles which present no significant hazard:

   — substances, mixtures and articles which present only a small hazard in the event of ignition or initiation. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of almost the entire contents of the package;

(e) Division 1.5 Very insensitive substances or mixtures which have a mass explosion hazard:

   — substances and mixtures which have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions;

(f) Division 1.6 Extremely insensitive articles which do not have a mass explosion hazard:

   — articles which contain only extremely insensitive substances or mixtures and which demonstrate a negligible probability of accidental initiation or propagation.

2.1.2.3. Explosives, which are not classified as an unstable explosive, shall be classified in one of the six divisions referred to in paragraph 2.1.2.2 of this Annex based on Test Series 2 to 8 in Part I of the UN RTDG, Manual of Tests and Criteria according to the results of the tests laid down in Table 2.1.1:
Table 2.1.1  
Criteria for explosives

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstable explosives or explosives of Divisions 1.1 to 1.6</td>
<td>For explosives of Divisions 1.1 to 1.6, the following are the core set of tests that need to be performed:</td>
</tr>
<tr>
<td></td>
<td>Explosibility: according to UN Test Series 2 (section 12 of the UN RTDG, Manual of Tests and Criteria). Intentional explosives (^{(1)}) shall not be subject to UN Test Series 2.</td>
</tr>
<tr>
<td></td>
<td>Sensitiveness: according to UN Test Series 3 (section 13 of the UN RTDG, Manual of Tests and Criteria).</td>
</tr>
<tr>
<td></td>
<td>Thermal stability: according to UN Test 3(c) (sub-section 13.6.1 of the UN RTDG, Manual of Tests and Criteria). Further tests are necessary to allocate the correct Division.</td>
</tr>
</tbody>
</table>

\(^{(1)}\) This comprises substances, mixtures and articles which are manufactured with a view to producing a practical, explosive or pyrotechnic effect.

2.1.2.4. If explosives are unpackaged or repacked in packaging other than the original or similar packaging, they shall be retested.

2.1.3. Hazard Communication

Label elements shall be used for substances, mixtures or articles meeting the criteria for classification in this hazard class in accordance with Table 2.1.2.

NOTE to Table 2.1.2: Unpackaged explosives or explosives repacked in packaging other than the original or similar packaging shall include all of the following label elements:

(a) the pictogram: exploding bomb;
(b) the signal word: ‘Danger’; and
(c) the hazard statement: ‘explosive; mass explosion hazard’

unless the hazard is shown to correspond to one of the hazard categories in Table 2.1.2, in which case the corresponding symbol, the signal word and/or the hazard statement shall be assigned.

2.1.4. Additional Classification Considerations
This section identifies the additional considerations relating to the test procedures called up, and any exceptions to the requirements for testing.
### Label elements for explosives

<table>
<thead>
<tr>
<th>Classification</th>
<th>Unstable Explosive</th>
<th>Division 1.1</th>
<th>Division 1.2</th>
<th>Division 1.3</th>
<th>Division 1.4</th>
<th>Division 1.5</th>
<th>Division 1.6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GHS Pictograms</strong></td>
<td>![Pictogram]</td>
<td>![Pictogram]</td>
<td>![Pictogram]</td>
<td>![Pictogram]</td>
<td>![Pictogram]</td>
<td>![Pictogram]</td>
<td></td>
</tr>
<tr>
<td><strong>Signal Word</strong></td>
<td>Danger</td>
<td>Danger</td>
<td>Danger</td>
<td>Danger</td>
<td>Warning</td>
<td>Danger</td>
<td>No signal word</td>
</tr>
<tr>
<td><strong>Hazard Statement</strong></td>
<td>H200: Unstable Explosive</td>
<td>H201: Explosive; mass explosion hazard</td>
<td>H202: Explosive; severe projection hazard</td>
<td>H203: Explosive; fire, blast or projection hazard</td>
<td>H204: Fire or projection hazard</td>
<td>H205: May mass explode in fire</td>
<td>No hazard statement</td>
</tr>
<tr>
<td><strong>Precautionary Statement Prevention</strong></td>
<td>P201</td>
<td>P210</td>
<td>P210</td>
<td>P210</td>
<td>P210</td>
<td>P210</td>
<td>No precautionary statement</td>
</tr>
<tr>
<td></td>
<td>P230</td>
<td>P230</td>
<td>P230</td>
<td>P230</td>
<td>P230</td>
<td>P230</td>
<td></td>
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<tr>
<td></td>
<td>P234</td>
<td>P234</td>
<td>P234</td>
<td>P234</td>
<td>P234</td>
<td>P234</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P240</td>
<td>P240</td>
<td>P240</td>
<td>P240</td>
<td>P240</td>
<td>P240</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P250</td>
<td>P250</td>
<td>P250</td>
<td>P250</td>
<td>P250</td>
<td>P250</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P280</td>
<td>P280</td>
<td>P280</td>
<td>P280</td>
<td>P280</td>
<td>P280</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P380 + P373</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Precautionary Statement Storage</strong></td>
<td>P401</td>
<td>P401</td>
<td>P401</td>
<td>P401</td>
<td>P401</td>
<td>No precautionary statement</td>
<td></td>
</tr>
<tr>
<td><strong>Precautionary Statement Disposal</strong></td>
<td>P401</td>
<td>P501</td>
<td>P501</td>
<td>P501</td>
<td>P501</td>
<td>No precautionary statement</td>
<td></td>
</tr>
</tbody>
</table>
NOTE 1: Unpackaged explosives or explosives repackaged in packaging other than the original or similar packaging shall include all of the following label elements:

(a) the pictogram: exploding bomb;

(b) the signal word “Danger”; and

(c) the hazard statement: “Explosive; mass explosion hazard”

unless the hazard is shown to correspond to one of the hazard categories in Table 2.1.2, in which case the corresponding symbol, the signal word and/or the hazard statement shall be assigned.

NOTE 2: Substances and mixtures, as supplied, with a positive result in Test Series 2 in Part I, Section 12, of the UN RTDG, Manual of Tests and Criteria, which are exempted from classification as explosives (based on a negative result in Test Series 6 in Part I, Section 16 of the UN RTDG, Manual of Tests and Criteria) still have explosive properties. The user shall be informed of these intrinsic explosive properties because they have to be considered for handling — especially if the substance or mixture is removed from its packaging or is repackaged — and for storage. For this reason, the explosive properties of the substance or mixture shall be communicated in Section 2 (Hazards identification) and Section 9 (Physical and chemical properties) of the Safety Data Sheet and other sections of the Safety Data Sheet, as appropriate."
### CLP Marking Summary Table

<table>
<thead>
<tr>
<th>Classification</th>
<th>Division 1</th>
<th>Division 2</th>
<th>Division 3</th>
<th>Division 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GHS Pictogram</strong></td>
<td><img src="image" alt="Pictogram" /></td>
<td><img src="image" alt="Pictogram" /></td>
<td><img src="image" alt="Pictogram" /></td>
<td><img src="image" alt="Pictogram" /></td>
</tr>
<tr>
<td><strong>Signal Word</strong></td>
<td>Danger</td>
<td>Danger</td>
<td>Danger</td>
<td>Warning</td>
</tr>
<tr>
<td><strong>Hazard Statement</strong></td>
<td>Explosive; mass explosion hazard</td>
<td>Explosive; severe projection hazard</td>
<td>Explosive; fire, blast or projection hazard</td>
<td>Fire or projection hazard</td>
</tr>
<tr>
<td><strong>Precautionary Statements Prevention</strong></td>
<td>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P230 Keep wetted with ... ... Manufacturer / supplier to specify appropriate material. P234 Keep only in original packaging. P240 Ground and bond container and receiving equipment. P250 Do not subject to grinding / shock / friction ... Manufacturer / supplier to specify applicable rough handling. P280 Wear protective gloves / protective clothing / eye protection / face protection.</td>
<td>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P230 Keep wetted with ... ... Manufacturer / supplier to specify appropriate material. P234 Keep only in original packaging. P240 Ground and bond container and receiving equipment. P250 Do not subject to grinding / shock / friction ... Manufacturer / supplier to specify applicable rough handling. P280 Wear protective gloves / protective clothing / eye protection / face protection.</td>
<td>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P230 Keep wetted with ... ... Manufacturer / supplier to specify appropriate material. P234 Keep only in original packaging. P240 Ground and bond container and receiving equipment. P250 Do not subject to grinding / shock / friction ... Manufacturer / supplier to specify applicable rough handling. P280 Wear protective gloves / protective clothing / eye protection / face protection.</td>
<td>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P230 Keep wetted with ... ... Manufacturer / supplier to specify appropriate material. P234 Keep only in original packaging. P240 Ground and bond container and receiving equipment. P250 Do not subject to grinding / shock / friction ... Manufacturer / supplier to specify applicable rough handling. P280 Wear protective gloves / protective clothing / eye protection / face protection.</td>
</tr>
</tbody>
</table>
See below for other text requirements
| Precautionary Statements Response | P370+P372+P380+P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives | P370+P372+P380+P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives | P370+P372+P380+P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives | For 1.4 except 1.4S use:- P370+P372+P380+P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives. For 1.4S use:- P370+P380+P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. |
| Precautionary Statement Storage | P401 Store in accordance with ... ... Manufacturer/supplier to specify local/regional/ national/ international regulations as applicable. | P401 Store in accordance with ... ... Manufacturer/supplier to specify local/regional/ national/ international regulations as applicable. | P401 Store in accordance with ... ... Manufacturer/supplier to specify local/regional/ national/ international regulations as applicable. | P401 Store in accordance with ... ... Manufacturer/supplier to specify local/regional/ national/ international regulations as applicable. |
| Precautionary Statement Disposal | P501 Dispose of contents / container to ... ... in accordance with local / regional / national / international regulation (to be specified). Manufacturer / supplier to specify whether disposal requirements apply to contents, container or both. | P501 Dispose of contents / container to ... ... in accordance with local / regional / national / international regulation (to be specified). Manufacturer / supplier to specify whether disposal requirements apply to contents, container or both. | P501 Dispose of contents / container to ... ... in accordance with local / regional / national / international regulation (to be specified). Manufacturer / supplier to specify whether disposal requirements apply to contents, container or both. | P501 Dispose of contents / container to ... ... in accordance with local / regional / national / international regulation (to be specified). Manufacturer / supplier to specify whether disposal requirements apply to contents, container or both. |

Optional Precautionary statements which are generally not required for ammunition items.

**P230** Keep wetted with ... - for substances and mixtures which are wetted, diluted, dissolved or suspended with a phlegmatiser in order to reduce or suppress their explosive properties (desensitised explosives)

**P234** Keep only in original packaging.
P240 Ground and bond container and receiving equipment. - if the explosive is electrostatically sensitive

P250 Do not subject to grinding / shock / friction ... - if the explosive is mechanically sensitive

P280 Wear protective gloves / protective clothing / eye protection / face protection.