



Government
of South Australia

SafeWork SA

Classification of explosives

Guidance Note

OFFICIAL

In South Australia, any explosive that a person seeks to possess, store, use, transport or manufacture must be classified and authorised by SafeWork SA (Section 6 of the Explosives Act, 1936 (the Act), and Regulation 2.02 of the Explosives Regulations 2011 (the Regulations)).

The purpose of this guide is to inform applicants of the information required to assess your application for classification and authorisation of an explosive product. It applies to both, new applications and variations of an existing authorisation.

General

To classify an explosive, the composition, quality and character of the product must be defined (Section 6(1) of the Act). Classification may be permanent, or temporary with conditions for a specific purpose (e.g. experimental trials of a new product). Classification may apply to an explosive substance or an article containing an explosive.

In reviewing your application, SafeWork SA will consider the information that you have supplied to assess whether the product is safe and suitable for use within South Australia, and that it complies with all applicable regulations.

Once approval is given, you will receive an authorisation for your product to be imported, transported, stored and used within South Australia, and the authorised definition of your product. The name of your product will ultimately be published in the South Australian Government Gazette; however, any sensitive information that you supply in your application (e.g. formulation) is held as commercial-in-confidence. SafeWork SA will not release such information without your permission, unless directed to do so by a court of law.

Occasionally, an Australian agent will import a product manufactured overseas – if the overseas manufacturer is unwilling to provide confidential details to us via the applicant, the manufacturer can provide that information directly to SafeWork SA.

Product UN tests

SafeWork SA will classify the product according to the procedures detailed in Part 1 of the United Nations Manual of Tests and Criteria. Testing of the product is carried out by an independent specialist with the facilities to conduct the tests. The purpose of this testing is to assign the product to one of the hazard divisions and compatibility groups within Class 1 dangerous goods. Further information about these divisions and groups is detailed in the United Nations Manual of Tests and Criteria and a summary can be found in Regulation 2.03 of the Regulations. It is important to note that many of these tests require the product to be tested in the form that it is packaged for transport. Any deviation from the transport packaging will need to be justified in the test report.

The testing agency will produce a report detailing the results of the UN tests conducted and will recommend a classification for the explosive product tested. The UN Test Report will be reviewed by SafeWork SA and used as evidence to support the product classification. Any gaps in the testing process or interpretation of the results will be discussed with you.

OFFICIAL

OFFICIAL

If a product has been classified and authorised in another jurisdiction (interstate or overseas), you may supply this information as supporting evidence. However, authorisation in another jurisdiction does not guarantee it will receive classification and authorisation in South Australia.

Product packaging

The general requirements for packaging of explosives in South Australia is governed by Part 6 of the Regulations – applicants should familiarise themselves with the requirements of these regulations when preparing their application.

Additionally, when products will need to be packaged for transport, the procedures detailed in Chapter 4.1 and Chapter 6 of the Australian Code for Transport of Dangerous Goods by Road and Rail (the ADG Code) apply. You will need to supply a packaging test report certifying that the packaging is suitable for the type and weight of explosive product in question.

Section 5.2.1.1.1 of the ADG Code further requires that packaging is marked with the name and address in Australia of the manufacturer or consigner of the product – explosives imported from overseas may need these details to be added to the packaging at the time of import or prior to further distribution.

Composition

You will need to supply the exact composition of your product, including the manufacturing tolerances, and chemical names of all ingredients. It is not suitable to supply compositions with very broad ranges (as is often supplied for SDS's), and it is not suitable to list an ingredient by its function (e.g. "density agent" or "burn rate modifier"). It is not necessary to specify which supplier you are sourcing your ingredients from.

The net explosive quantity (NEQ) for any article or package must be specified, including a breakdown of the energetic components within the article (e.g. supply the NEQ for the igniter pellet and main charge for a flare). Technical drawings specifying the dimensions of the product, and arrangement of the explosive sections within, must also be supplied for explosive articles.

Additionally, authorised definitions are highly specific for your product. The authorised definition can detail a number of different variants within a single product family – you do not need a different application for each variant if the only difference is a physical dimension (e.g. lead length, cartridge diameter, delay time), but each separate part or variant within that family must be specified and will be listed in the authorised definition.

The authorised definition is a confidential document relating to your product. It is not released publically – only the product name and classification is published in the South Australian Government Gazette.

OFFICIAL

Supplementary information

In order for us to understand the nature and behaviour of the product, you will need to supply product advertising / technical data sheets, performance data (e.g. burning rates, velocity of detonation, etc), safety data sheets (which comply with Regulation 330 of the Work Health and Safety Regulations, 2012), and emergency procedure guides for your product.

You will also need to identify the shelf life of the product, hazards associated with its deterioration, and supply recommendations for how the product should be disposed of.

Classification by analogy

If your product is sufficiently similar to another product already classified by SafeWork SA, and you are the owner of that authorised definition, then you can apply for the new product to be classified by analogy – this can reduce the requirements for what documents need to be submitted with your application. An example of this is that you have changed the trade name of a product but kept the formulation the same – here, the new product must be classified, but it can be done by analogy with the previous product.

Alternatively, if you are using a contract manufacturer to produce one of their classified products under your trade name, you will need to apply for classification under your name.

Similarly, during UN testing if two variants within a product family are sufficiently alike, then only one variant needs to be subjected to UN testing while the other can be classified by analogy.

Variations to existing authorised definitions

Where the nature of the product has changed from its authorised definition, you will need to apply for a variation. Examples include changed composition, a request to change the hazard classification or compatibility group, new part numbers, different packaging, or changed product dimensions.

Minor changes may be approved by analogy; however, substantial changes to the composition of a product or changes to the hazard classification will require an updated UN test report to be supplied.

Temporary authorisations

Where you need approval for a product for only a limited purpose and for a limited period, a temporary authorisation may be issued. Examples of this would be for transport of a product for trials and testing, manufacture of a product for UN testing, or temporary storage of a product prior to disposal.

Please contact SafeWork SA to discuss your specific requirements if you are seeking a temporary authorisation.

OFFICIAL

Evidence required for applications

To ensure the smooth processing of your application, you will need to provide sufficient evidence that the product is safe for use, transport and storage in South Australia, and that it complies with all applicable regulations. The application form must be completed in full. Further guidance for the individual sections is found at the end of the application form.

All information must be supplied in English – foreign language documents must be accompanied by a translated version.

The following list provides the minimum information that SafeWork SA will rely on to assess your application. The more information that is supplied at the time of your application will reduce the need for our inspectors to contact you for further details.

- Completed “Application for Classification of an Explosive” form
- A test report which outlines the product testing completed in accordance with the UN Manual of Tests and Criteria
- Packaging test report
- Details of labelling of the article, inner packaging & outer packaging (as appropriate)
- Safety data sheet
- Emergency procedure guide
- Product technical data sheet
- Product technical drawings (for articles)

For more information, please contact SafeWork SA by telephone 1300 365 255, via email (chem.safework@sa.gov.au), or via our website safework.sa.gov.au.

Related documents

- [Explosives Act 1936](#)
- [Explosives Regulations 2011](#)
- [Work Health and Safety Regulations 2012](#)
- [Australian Code for the Transport of Explosives by Road and Rail, 3rd Edition](#)
- [Australian Code for the Transport of Dangerous Goods by Road and Rail, Edition 7.7](#)
- [United Nations Manual of Tests and Criteria, 7th Edition](#)