

# How to complete the application form

(Authorisation of an explosive, amendment of an authorised explosive, trial and extension of trial of an unauthorised explosive)



Explosives Inspectorate

October 2012

## Steps to completing the form

1. **Download the application form** from:  
The application form is in an electronic format as a writeable Adobe pdf document. The applicant is able to write information into the form electronically and save a draft of the application on a local drive. People who use the form regularly may wish to fill in the fields in section 2 with your company details and save a copy of the form. These details will appear every time you use the form for a new authorisation of explosives application. It is recommended to save the draft form with the following name format 'QLD\_Auth\_Expl\_Blank.pdf'.
2. The form uses the free Adobe Acrobat Reader software. If your computer does not already have this installed, it can be downloaded from the internet at <http://www.adobe.com/acrobat>.
3. If completing the application form by hand, see point 9.
4. **Getting started.** Open the blank form with Adobe Acrobat. Alternatively you can locate the form in your local drive and double click on the icon.
5. Move around the form with either your mouse or your keyboard.  
**Using the mouse.** Click on the highlighted field. The cursor will appear and you can either start writing or select a choice (YES/NO).  
**Using the keyboard.** Press the 'Tab' key on your keyboard and the cursor will move to the next field. To go back to the previous field, press 'Shift' and 'Tab' together.
6. **Finalising and signing the form.** Once you have entered the information requested and you are in section 12, you will be able to attach an image file of your signature (you must have an image of your signature stored in your hard drive).
7. **Saving the form.** We recommend saving the file using this format: 'Appl\_CompanyName\_Product\_MonthYear.pdf'. For example, the company 'Best Explosives' would like to request the authorisation of its explosive 'Super Nitro'. In this case, the file name will be 'Appl\_BestExplosives\_SuperNitro\_July12.pdf'. Using this convention to save the file will help us to identify your company and your product after we receive the form by e-mail.
8. **Electronic submission of the form.** After the form has been saved, click on the 'e-mail form' button at the end of the document and follow the instructions on the screen. Your e-mail inbox will open and the form, having the name given in the previous step, will be attached to an e-mail. Please do not edit the e-mail subject line. You can then type any explanatory text you wish into the e-mail or attach further documents before clicking on the 'Send' button. The e-mail will be sent to [explosives@dnrme.qld.gov.au](mailto:explosives@dnrme.qld.gov.au)
9. **Printing the form.** If you want to mail a hard copy to the Explosives Inspectorate. Click on the 'Print form' button located on the first page. Once the form is printed, complete the form, sign it and mail to the address as shown on the last page of this document.
10. Once the Inspectorate receives the form, you will receive an e-mail to acknowledge receipt.

To start completing the form with the information about the explosive, you will need the following references:

Ref.	Name	Link to download the publication
1	AEC3	<a href="http://www.safeworkaustralia.gov.au/AboutSafeWorkAustralia/WhatWeDo/Publications/Pages/CP2009ACTransportOfExplosivesbyRoadAndRail3rdEdition.aspx">http://www.safeworkaustralia.gov.au/AboutSafeWorkAustralia/WhatWeDo/Publications/Pages/CP2009ACTransportOfExplosivesbyRoadAndRail3rdEdition.aspx</a>
2	ADG7	<a href="http://www.ntc.gov.au/viewpage.aspx?documentid=01147">http://www.ntc.gov.au/viewpage.aspx?documentid=01147</a>
3	SDS CoP	<a href="http://www.safeworkaustralia.gov.au/AboutSafeWorkAustralia/WhatWeDo/Publications/Pages/CP2003MaterialSafetyDataSheets2ndEdition.aspx">http://www.safeworkaustralia.gov.au/AboutSafeWorkAustralia/WhatWeDo/Publications/Pages/CP2003MaterialSafetyDataSheets2ndEdition.aspx</a>

# Information to be included on the form

## Section 1 - Application type

Select the relevant application type

- Authorisation of explosive
- Approval for trial of unauthorised or prohibited explosive
- Amendment to existing authorisation
- Extension of trial of unauthorised or prohibited explosive

For amendment to an explosive, please specify what is being amended to the current authorisation in the space provided (e.g. change to the packaging, minor change to the formulation etc). A major change to the formulation or a change to the name of the explosive will require a new authorisation of explosive application to be submitted.

## Section 2 — Applicant's details

Enter details as appropriate.

## Section 3 — Details of the manufacturer and importer of the explosive

Enter details as appropriate.

## Section 4 — Details of the explosive to be authorised or approved for a trial:

- Authorised name of the explosive.** Name given to the explosive by its manufacturer, for authorisation and legal reference. This is the name that will appear on the box label the explosives are packaged in and the associated documentation (including the SDS, TDS, import notification and consignment note). If the application is for a trial, you can use names such as reference codes (e.g. EXP-TX1).
- Proper shipping name.** This is the name under which the product is shipped and will appear on the outer packaging and associated documentation (including the SDS, TDS, import notification and consignment note). See below:

UN No	Proper Shipping Name and Description	Class Or Division	Sub Risk	Packing Group	Special Provisions	Limited Qty	Packages and IBCs		Portable tanks & bulk containers		Properties and Observations
							Instruction	Special Provisions	Instruction	Special Provisions	
0029	DETONATORS, NONELECTRIC for blasting†	1.1B				NONE	P131	PP68			
0030	DETONATORS, ELECTRIC for blasting†	1.1B				NONE	P131				

The proper shipping name must be entered exactly as is listed in section 2, pages 132–67, of AEC3 (reference 1) or section 3.2.3, pages 148-234, of ADG7 (reference 2).

- Intended use.** Indicate the main use of the substance or articles and how it functions:
  - Example 1 – Detonator for use in blasting, initiated by shock tube
  - Example 2 – Shaped charge for perforation, initiated by detonating cord
  - Example 3 – Precursor for explosives, sensitised on site prior to loading into blast holes, initiated by detonator and booster (i.e. primer)
- UN classification information.** Indicate the UN Classification code (provides hazard division and compatibility group (e.g. 1.1D) and the UN number for the explosive (four digit number). **Note:**
  - The classification code and UN number must match with either the table shown in section 2, pages 132-67 of AEC3 (reference 1) or the table on pages 148-234, section 3.2.3 of ADG7 (reference 2).
  - Certain explosives (such as detonators) may have more than one classification code (i.e. 1.1B, 1.4B or 1.4S). If this is the case, you need to provide all classification codes that apply to the explosive to be authorised.

Please indicate whether or not the UN testing for classification of the substance has been conducted. If 'Yes', you are required to produce the test certificate(s). If 'No', you are required to justify how the classification was established (e.g. 'by analogy or comparison with product ABC').

An application for electronic detonators requires the test certificate and/or report to be provided.

If authorisation is being sought for plastic explosives, the applicant must ensure the explosives comply with the United Nations Convention on the Marking of Plastic Explosives for the Purpose of Detection (MARPLEX). This requires chemical taggants to be contained within the explosive.

For further information, see the [Fact Sheet](#) from the Federal Government Attorney-General's Department:

- e. **Type of explosive.** Indicate if the explosive is a substance or article. For an article, you must provide the Net Explosives Quantity (NEQ) of each article. If you are authorising an explosive with different sized articles (e.g. boosters of different mass and size) you must provide details for each sized article and the NEQ of each. The number of articles per package must be supplied. You may attach a separate sheet for this section if required.

For explosives authorised in another jurisdiction, a copy of the explosive authorisation from each jurisdiction must be provided.

- f. **Explosive formulation. IMPORTANT** — If you complete this section with the words 'See attached Safety data sheet (SDS)', the application will NOT be accepted and will be returned to you. You must complete the information in the form. A separate sheet may be attached but must contain the information required in this section.

**Chemical Name:** You must write the correct chemical name of the explosive.

**CAS number:** (CAS – Chemical Abstract System). The technical team of your company (or your supplier) would be the most appropriate group to ask for this information. In addition, the CAS number usually appears in the SDS.

**% (w/w):** You must place a specific percentage of the explosive. Example: if the base charge of a detonator is 0.450 mg of PETN and 0.150 mg of lead azide, and the weight of the detonator is 1000 mg (or 10 g), the composition of the explosive is 75% PETN and 25% lead azide, not 4.5% PETN and 1.5% lead azide (which are the percentages if considering the total weight of the detonator).

**Tolerances:** You must write the potential variation in the percentage. This applies to either explosives or fireworks.

**The total chemical composition:** must equal 100% (w/w).

**Note:** The information provided to the Inspectorate regarding the formulation for an explosive is treated as commercial in confidence and given restricted access. Only authorised departmental officers have access to this information and this information will not be disclosed to any other third party without your consent, unless required by law.

- g. **Description/characteristics of the explosive.** See the type of information required in this section in the table below.

Substance or article	Characteristics
High explosives	Sensitivity, density, VOD (confined/unconfined), energy, stability test results for NG based Explosives.
Detonating cords	Velocity of detonation (VOD), grams/meters, special uses (for example high temperature).
Safety fuses	Burning rate, burning rate tolerance, lateral ignition, water resistance.
Detonators	Type — plain, electric, non-electric, electronic; delays, MS or LP or programmable, standard or extra strength wire/shock tube.
Propellants	Thickness, colour, grain shape, perforation, density, burning rate, stability test results, smokeless.
Boosters	Sensitivity, sizes, Velocity of Detonation (VOD), applications.
Fireworks	Effects, duration, burst spread, lifting and bursting charges, height.
ANE	Viscosity, density, applications
Shaped charges	Explosive, lining material, penetration in steel
Bulk explosives	Blend series (if blended with ANFO), densities, critical diameter confined / unconfined at determined densities, minimum booster at different diameter and densities, gassing system, gassing time etc.
Other explosives	Effect, form (powder, pellets etc), and properties.

Include details regarding the dimensions of the item and relevant information regarding the type of materials used for the packaging, lead wires etc. as relevant to the explosive.

**Example 1** — Boosters of PETN/TNT, 35mm diameter x 100mm length or 55mm diameter x 100mm length, with two wells, a PETN bottle, encased in a plastic container (3mm wall).

**Example 2** — Shaped charges with different diameters (30, 50, 100mm) and different lengths (30, 50 and 80mm), encased in a metallic liner. The charges are positioned in a perforating gun and are initiated by a detonating cord.

**Example 3** — ANE having a viscosity of 40Pa\*s, density 1.35g/ml, 60°C, used to manufacture blasting explosives.

## Section 5 — Construction of the explosive article

An engineering drawing (in pdf format) must be attached to the application.

Pictures of the product must be attached. To do this, click in the box in the PDF form. See examples below.



## Section 6 — Performance and test details

Provide details of testing of the explosive in accordance with the UN Manual of Tests and Criteria. Certificate of testing must be attached.

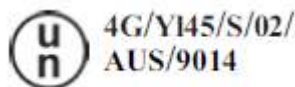
Also attach/submit certificates provided by the testing organisation (i.e. BAM/Germany, CERL/Canada, INERIS/France, HSE/UK etc).

Certain explosives may be authorised based on a default classification and will not require the test report or certificate to be supplied (e.g. blasting explosives of Classification Code 1.1D or detonators of Classification Code 1.1B).

## Section 7 — Packaging details

**Marking:** (packaging which bears the marking) should be successfully tested design type that complies with the requirements of section 6.1.3 of ADG7 (reference 2).

- a. **UN Packaging Approval No.** — Companies/laboratories that test the packaging issue a package design certificate containing the UN approval number. The certificate must be attached to the application. The following picture displays an example of this marking.



The marking from the above example should be written as '4G/Y145/S/02 AUS/9014'. If the substance or article/s are to be transported in different types of packaging, include all of them.

- b. **Packing instruction No.** - (letter and number combination). The packing instructions indicate the packaging (including IBCs and large packaging), which may be used for the transport of substances and articles. See table below as an example of where to find the packing instructions for the product.

UN No	Proper Shipping Name and Description	Class Or Division	Sub Risk	Packing Group	Special Provisions	Limited Qty	Packages and IBCs		Portable tanks & bulk containers		Properties and Observations
							Instruction	Special Provisions	Instruction	Special Provisions	
0029	DETONATORS, NONELECTRIC for blasting†	1.1B				NONE	P131	PP68			
0030	DETONATORS, ELECTRIC for blasting†	1.1B				NONE	P131				



You can find the packaging instructions for your product in column 8 of the table in section 2, pages 134-67, of AEC3 (reference 1). Alternatively, you can find the same information in section 3.2.3, pages 146-234, of ADG7 (reference 2).

- c. **Package design type approval** number - The package must have a packaging design type approval number issued by the Competent Authority. You must attach the test certificate and report of the testing required by Section 8.2.5(4) of AEC 3 (e.g. drop test, stack test, Cobb water resistance test).
- d. **Description of packaging** - Describe dimensions, material and content of the packaging. See example below.

Examples	Outer	Intermediate	Inner
1	A cardboard box of dimensions 350mm x 250mm x 150mm	None	10 reels having 500 m of wire each. A detonator is attached to the end of each wire. The other end of the wire has a tag.
2	A cardboard box of dimensions 350mm x 500mm x 150mm	A polyurethane foam block of 330mm x 480mm x 30mm, which is placed at the bottom and the top	A cardboard tray with 24 holes (6 x 4) of 30mm. A shaped charge is place in each hole
3	A cardboard box of 600mm x 600mm x 600mm	A clear polyethylene lining	10 plastic coils of 45mm in diameter and 1500 m in length
4	A metallic drum of 400mm diameter and 500mm in height	None	A polyethylene bag, containing 10 kg of wetted PETN
5	A cardboard box of 200mm x 200mm x 110mm	A clear polyethylene lining	25 cylindrical boosters (45mm x 100mm) wrapped in cardboard.
6	A cardboard box of 420mm x 320mm x 200mm	None	4 cardboard boxes of 100mm x 300mm x 180mm. Each cardboard box contains 100 detonators.

**Labelling:** The labelling of the articles' packaging must be in English and legible and comply with section 3.2 of AEC3 (reference 1).

Complete the checklist by ticking the boxes to ensure correct information is supplied. The lettering size (mm) must be completed

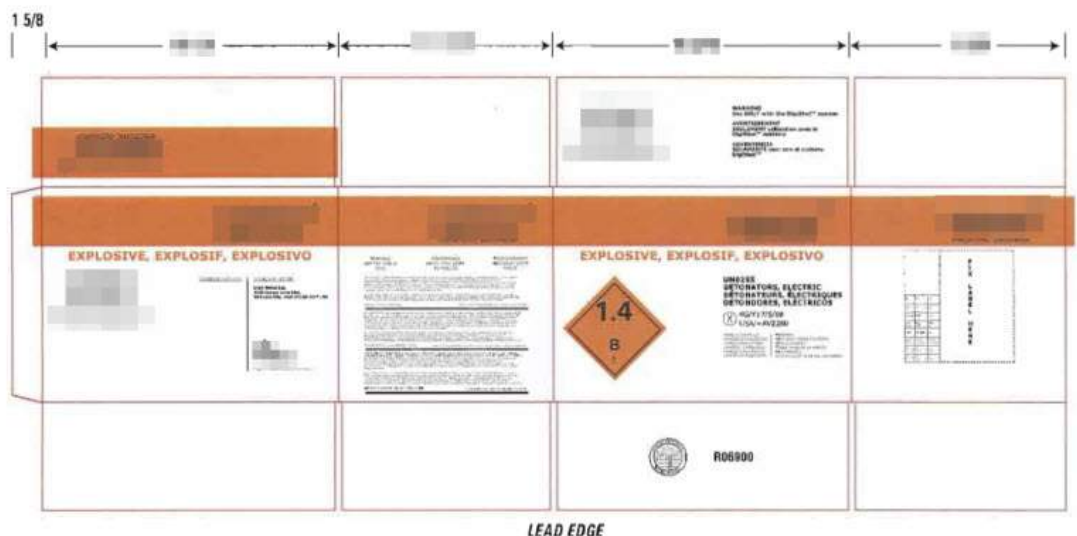
The inner packaging information is only required if there is an inner pack. Some of this information will be required if the article (e.g. detonator or packaged explosive) requires labelling in accordance with section 3.2.3 or 3.2.4 of AEC3.

**Compliance with AEC3 or ADG7.** In this section you must confirm whether or not the labelling and the packaging complies with AEC3 or ADG7. If not, you must give reasons.

In this section the applicant must attach technical drawings of the packaging. See example of technical drawing below.

In addition to the technical drawing of the packaging, pictures from the different sides of the box as well as pictures of the boxes showing the product must be included.

**Note:** The pdf form you are completing has fields where you can insert photographs just by clicking in the box.



See examples below of the types of photographs needed in this section.

Photograph from side of outer box

**Note:** the right-hand side picture is showing the marking required by section 7.



Photograph from top of outer box, closed

**Note:** Ideally, the pictures of the side of the packaging should show the label with the name of the product.



Photographs from outer box, open, showing product



*Photograph of inner packaging, open, showing product*



*Photograph top of the outer box, open, without product*



*Photography of outside, showing inner packaging*



**Note:** that each picture should not be larger than 200kb.

## **Section 8 — Technical and Safety Information**

- a. **Shelf life:** The manufacturer must indicate a shelf life for the explosive. In some cases the Explosives Inspectorate may require further information in relation to the testing to determine shelf life.
- b. **Hazards:** Indicate the hazards when transporting/storing/use, etc.
  - Example 1** — ‘The product has been designed for use in zones of mild reactivity. The product might explode if used in zones of high reactivity.’
  - Example 2** — ‘The product has been designed for use at temperatures of up to 70°C, with a sleeping period of not more than 8 hours.’
  - Example 3** — ‘The product will increase its sensitivity dramatically if water evaporates/leaks. The container must be properly sealed after use.’
- c. **Nature of deterioration:** Describe effect of ageing and deterioration of the explosive.
- d. **Special precautions for handling and use:** Indicate the precautions when handling. Consider stages such as loading a truck, unpacking or using the product.
- e. **Method of disposal:** Indicate how the product can be disposed of safely (e.g. by detonation in a controlled manner, burning, dissolving in water etc.)
- f. **Accident or safety issues:** If you answer ‘Yes, you are required to provide information on the incident and the measures taken to prevent similar incidents in the future. This can be in the form of a investigations findings report and attached to the emailed submission.

## Section 9 — Trial Information (if applicable)

- a. **Reason for the trial:** In this section the applicant must include reasons for the trial (new product for specific application, cost optimisation, etc).
- b. **Duration of the trial:** Provide dates (from DD/MM/YY to DD/MM/YY)
- c. **Location of the trial:** Please provide specific location details.
- d. **Amount of explosive/unit to be used:** weight or units
- e. **Technical person in charge of the trial and contact number**

## Section 10 — Permitted Explosives (if applicable)

For permitted explosives used in underground coal mining operations, the applicant must provide the certificate that the product is approved for use as P1, P3, P4, P5 or P4/P5. The testing must be conducted under the UK Testing Memorandum 2 (TM2) regime.

## Section 11 - Additional information

Please use this section if you wish to provide any further information for the application.

## Section 12 - Declaration

You can submit this form electronically by inserting your electronic signature and selecting the email form option. Your completed form will automatically attach to an email. If you need to include attachments, please attach these to the email at this time.

Alternatively you can print out the completed form, sign the declaration manually and send via post to the:  
Explosives Inspectorate's Head Office.  
PO Box 15216  
CITY EAST QLD 4002  
Phone: 07 3224 7512  
Facsimile: 07 3224 7768

**The checklist on the last page of the application form will assist you to ensure the correct information is provided. Incomplete applications will be returned to the applicant unprocessed.**

## Further information

Explosives legislation can be found at: [http://www.legislation.qld.gov.au/Acts\\_SLs/Acts\\_SL\\_E.htm](http://www.legislation.qld.gov.au/Acts_SLs/Acts_SL_E.htm)  
The application form for authorisation of an explosive, amendment of an explosive, trial of an explosive and extension of trial of an explosive can be found at: [Application form](#)  
IB71 and IB 37 can be found at: [Information Bulletins](#)

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Authorised by **Geoff Downs** | Chief Inspector of Explosives

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