



DANGEROUS GOODS SAFETY MATTERS

Black powder, propellant powder and ammunition for licensed gun owners



CARRY BOX REQUIREMENTS

The design, security features and markings on a carry box are the same for storage as for transport.

Security specifications

- Lockable (e.g. hasp) – a high security lock with secured keys to prevent access by unauthorised persons is recommended.
- Remain closed and locked when not in use.
- Stored in a locked room that is not in the way of emergency exits, but can be easily removed if required.

Design specifications

- Made from 19 mm plywood or hardwood, or a metal container that is wood lined.

Note: Wooden boxes insulate from heat, protect from fire, do not allow friction which could generate sparks, and are built to allow pressure to escape.

- Screws and fittings inside the container should be covered and filled (to prevent sparks).
- Brass hinges and fittings should be used for the storage of black powder (to prevent sparks).
- Painted a light colour inside and out (so spillage can be seen and to prevent seepage into wood).
- Marked with:
 - a class label indicating appropriate division (100 mm square; refer to Table 2)
 - the words 'EXPLOSIVES' (e.g. 75 mm letters) in red letters, and where appropriate 'PROPELLANT POWDER' or 'BLACK POWDER' (e.g. 25 mm letters).

Note: Labelling advises emergency services of the danger so that, if safe to do so, carry boxes can be removed from fire situations.



USEFUL RESOURCES

Western Australia Police, firearms licensing services
www.police.wa.gov.au/About-Us/Our-agency/Police-Licensing-Services/Firearms

Australian Code for the Transport of Explosives by Road and Rail [3rd edition]

www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/cp2009actransportofexplosivesbyroadandrail3rdedition

Department of Mines and Petroleum, Guidance notes

Storage of explosives

Transport of explosives on roads and at mines

www.dmp.wa.gov.au/Safety/Guidance-notes-16208.aspx

This publication is available on request in other formats for people with special needs.

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Black powder (or gun powder) and propellant powder are used by licensed gun owners as a muzzle-loading powder or in the manufacture or re-loading of ammunition, respectively. They easily ignite through heat or flame, and the explosive release of energy makes them ideal for their use in firing ammunition. In uncontrolled conditions however, the ignition of black powder, propellant powder and ammunition (all classed as explosives) can result in damage and injury.

The possession of black powder, propellant powder and ammunition requires

authorisation from the Police Licensing Services under the *Firearms Act 1973*. As long as an individual is storing and transporting black powder and propellant powder at or below exempt quantities (Table 1) for their personal use, dangerous goods explosive licensing is not required. Ammunition does not require an explosives licence. There is, however, under dangerous goods legislation, the requirement to store these goods safely and securely. There is also a general duty to take all reasonably practicable measures to minimise risk during storage and transport.

SEPARATE AND SEGREGATE

The United Nations (UN) dangerous goods classification scheme shows the hazards

presented by the explosive properties of black powder, propellant powder and ammunition (Table 2).

The divisions reflect the hazard from very high for black powder (easy to accidentally ignite by impact, sparks or friction), to low for ammunition. The hazard presented affects the quantity and how the explosive is stored and handled. It is recommended that individuals store and transport black powder, propellant powder and ammunition separately, to avoid reclassification and licensing.

Though the risk posed by exempt quantities is low, it is best practice that these goods are not transported in the same vehicle or stored in the same carry box, and they should be separated from:

- other dangerous goods (e.g. pool chemicals)

- fire risk substances (e.g. LPG, petrol)
- any other materials likely to cause, spread or intensify fire.

The aim during storage and transportation is also to prevent ignition if involved in fire (e.g. no smoking) and reduce situations where there is a potential for explosion (e.g. do not confine in a box that cannot let out gases).

SAFE AND SECURE STORAGE OF EXEMPT QUANTITIES

Black powder, propellant powder and ammunition must be kept safely and securely. Where possible they should be located away from residences, in a secure location protected from sources of risk (e.g. ignition, impact).

These goods must be kept at or below exempt quantities within a

carry box (or portable indoor magazine) that satisfies specific requirements (see *Carry box requirements*). If there are multiple carry boxes, they should be separated from each other (e.g. 5 m recommended).

SAFE AND SECURE TRANSPORT OF EXEMPT QUANTITIES

A person transporting black powder, propellant powder or ammunition for their own use should take the following preventative measures.

- Secure explosives in a carry box.
 - Note: Except when the explosives are in sealed packages that are immobilised in an enclosed vehicle body (e.g. boot).*
- Attach the carry box securely to the vehicle if not contained within an enclosed vehicle body.
- Do not stow explosives in, or have them accessible from, the passenger compartment.
- The vehicle should:
 - be lockable, roadworthy and in good repair
 - have an interior that is clean and in good condition, that does not contain material able to cause damage to the explosives
 - be parked at least 5 m from a fire risk and supervised until 15 minutes after switching off the engine
- Take precautions to deal with emergencies and prevent the theft of explosives.
- Handle the carry box or packages carefully when loading and unloading the vehicle.

Table 1 Exempt quantities of black powder, propellant powder and ammunition

	Exempt quantity (kg)	
	Storage	Transport
Black powder	≤ 4*	≤ 4
Propellant powder	≤ 15	≤ 50
Ammunition	Unlimited quantity	

* in containers with a 2 kg maximum capacity (also recommended for transport)

Table 2 UN dangerous goods classification scheme for black powder, propellant powder and ammunition

	UN Number – Class 1 explosives	
	Division	Hazard description
Black powder	1.1D	Having mass explosion hazard
Propellant powder	1.3C	Having a fire hazard and either a minor blast or projection hazard
Ammunition	1.4S	Having no significant hazard

