



**DANGEROUS GOODS SAFETY MATTERS**

# Safe storage and handling of dangerous goods on farms



## DISPOSAL

### Clean up spills or leaks

Dangerous goods stored on the farm sometimes spill or leak. Make sure that the spill or leak is cleaned up as soon as possible using a spill kit.

Check that you have a spill kit handy. The kit could include a bucket of clean dry sand, "kitty litter", clean empty containers with lids or caps for spill recovery, broom and shovel.

### Empty containers

Empty dangerous goods containers, such as plastic drums, need to be made safe through industry recycling initiatives like AgSafe's drumMUSTER collection, or containers properly disposed of. Re-use of dangerous goods containers should only happen after appropriate decontamination means (e.g. scrubbing, rinsing, steam cleaning) to effectively remove chemical residue.

## Unwanted chemicals

Keeping old or unwanted chemicals in your shed presents an unnecessary risk to people, animals and the environment.

AgSafe's ChemClear program is run periodically to assist in the disposal of unwanted chemicals.



### DID YOU KNOW?

Farms can be defined as a rural dangerous goods location under the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 and are required to meet safe storage and handling requirements.

## USEFUL RESOURCES

Department of Mines and Petroleum, [www.dmp.wa.gov.au](http://www.dmp.wa.gov.au)  
*Storage and handling of dangerous goods – Code of practice*

Australian Standards, [www.standards.org.au](http://www.standards.org.au)  
*AS 1940 The storage and handling of flammable and combustible liquids*  
*AS 2507 The storage and handling of agricultural and veterinary chemicals*  
*AS 4897 The design, installation and operation of underground petroleum storage systems*

AgSafe  
drumMUSTER program, [drummuster.com.au/](http://drummuster.com.au/)  
ChemClear program, [chemclear.com.au/](http://chemclear.com.au/)

National Transport Commission, [www.ntc.gov.au](http://www.ntc.gov.au)  
*Australian Dangerous Goods Code (ADG Code), 7<sup>th</sup> Edition*



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[www.dmp.wa.gov.au/DangerousGoods](http://www.dmp.wa.gov.au/DangerousGoods)

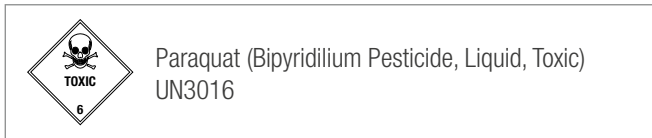


Dangerous goods are substances that have properties that can be dangerous or hazardous to health if not stored and handled safely. Most farms use some form of dangerous goods, either to operate machinery (e.g. fuel, oil) or to control weeds or pests (e.g. fumigants).

Here are some handy tips on how to store and handle these items safely.

## HOW CAN I RECOGNISE DANGEROUS GOODS?

These goods can be recognised from the marking and labelling, with the presence of a class diamond and a United Nations (UN) number on the packaging. The class diamond indicates which acute inherent hazard the item has.



A dangerous goods marking and labelling example

## ON DELIVERY

On receiving a delivery of dangerous goods, check that the packages are in sound condition and are labelled correctly.

If the packaging or labelling is defective, contact the supplier to rectify.

## WHAT DO I NEED TO CONSIDER WHEN STORING?

### Segregate

A number of dangerous goods can react dangerously when mixed and have the potential to start a fire or release toxic gases. Be safe and store these goods apart (Table 1).

### Security

Security measures need to be in place to prevent unauthorised access to dangerous goods.

This is particularly important for highly toxic dangerous goods such as 1080 baits and

aluminium phosphide pesticides, as well as other herbicides and pesticides.

### Protect storage areas from impact

On a farm, there is usually enough space to place dangerous goods storage facilities (e.g. shed) out of harm's way. However, this is sometimes not practical, for example if there is a fuel dispenser on, or adjacent to, an above ground fuel tank.

In these situations, you need to protect the tank and/or dispenser from vehicle impact. You can do this by installing bollards (concrete-filled steel pipes) or placing clean 200 L or 110 L drums filled with concrete or sand around the area.

## Underground tank storage or handling systems

Though uncommon, some properties have underground fuel storage tanks. These tanks need to be designed, installed, operated and maintained so that they do not leak.

Guidance is available in Australian Standard AS 4897 on how to store fuel in underground tanks safely (see *Useful resources*).



Old drums filled with concrete used as impact protection

## HOW DO I HANDLE DANGEROUS GOODS SAFELY?

### Ignition sources

When handling flammable liquids (e.g. petrol) or flammable gases, such as LP or acetylene gas, ignition sources need to be kept away. These sources include naked flames, mobile phones or activities such as smoking, welding, cutting and grinding.

### Safety information and equipment

Material safety data sheets (MSDSs), also known as safety data sheets (SDSs), are good sources of safety and health information for the dangerous goods you have. You should have all the MSDSs for the dangerous goods stored and handled at the farm readily accessible in case of spills, poisoning or emergencies.

MSDSs are available from the supplier or manufacturer of dangerous goods or can be found on the internet. These sheets also provide guidance on the types of personal protective equipment (PPE) that should be used when handling certain dangerous goods. This equipment should be kept and

maintained 'fit-for-purpose'. In particular, check that respirator cartridges are rated to the particular type of chemical being used.

### Workers and supervisors

Induction, information, training and supervision need to be provided to those who work with dangerous goods. There should be safe systems of work and work practices that enable people to perform their job safely.

Relevant training needs to be considered for:

- workers who carry out specific tasks, such as handling herbicides
- managers and supervisors who should have training relevant to the dangerous goods in areas they supervise.

This may be provided in-house or alternatively, take the form of in-services by agricultural industry trainers or chemical suppliers. This could include providing MSDSs and proper use of PPE and safety equipment.

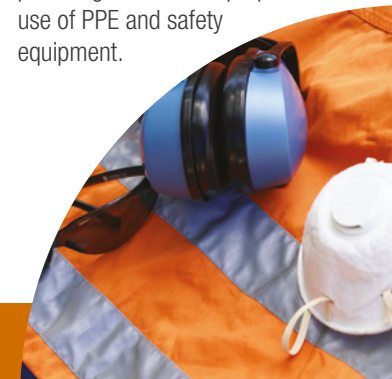


Table 1 Examples of dangerous goods to segregate

Segregate		
Pool chlorine (solid calcium hypochlorite)	from	Acids (e.g. hydrochloric acid) Oils and fuels
Bleach (liquid hypochlorite solution)	from	Acids
Dangerous goods	from	Foodstuffs
Oxygen gas*	from	LP gas* Acetylene gas*

\* Except when in use