# We all need to remember

- If you are unsure of anything or feel that something you have been asked to do is dangerous, DO NOT begin the task. ASK for assistance or more information and we will work together to find a safe way to do the job or solve the problem.
- Ensure you are aware of the location of the nearest First Aid Kit.
- Make sure everyone is fit for work, free from signs of fatigue, drugs or alcohol.
   If in doubt, ask or talk to your manager.
- This farm is a workplace, but may also be a place of residence for the owner, their managers and employees. Be vigilant for children and bystanders at all times. Refer to Child Safety on Farms.
- The safety, health and wellbeing of all who live on, work on and visit this farm is the most important responsibility we all share.

Even if we are busy and under time or financial pressures, safety MUST come first.



# **EMERGENCY CONTACTS**

In case of emergency, CALL 000 or your local emergency service provider, then call your manager or supervisor.

POISONS 13 11 26
Poisons Information Centre

# A Practical Guide

# **Safe Chemical Handling**

Agriculture relies on chemicals for various purposes, but it's crucial to use them responsibly to protect both yourself and the environment. Chemicals come in various forms—solid, liquid, or gas and can be made up of many different types of ingredients. This means that how each chemical needs to be used and handled will be different.

# What are Chemicals?

Common agricultural chemicals include fuels, solvents, pesticides, fertilisers and veterinary chemicals.

# The Hazards and Risks

Farm chemicals can pose risks when not handled with care. Harm can occur through:

- Ingestion: Swallowing a chemical accidentally.
- Absorption: Skin or eye contact with a chemical.
- · Inhalation: Breathing in chemicals.
- **Injection:** Entering the body through high-pressure devices or syringes.

Immediate effects may include symptoms like nausea, headaches, rashes, or respiratory issues.

Long-term exposure could lead to more serious conditions like cancers, birth defects, and organ diseases.

For more information on chemical types and their effects refer to *Hazardous Substance* and *Chemical Awareness Toolbox Talk*.

# How to keep yourself and others safe when using Chemicals

Read and Understand Labels: Always read the product label before using any farm chemical. The label contains vital information about the chemical's composition, hazards, and usage instructions.

**Proper Storage:** Store chemicals in their original containers, in a cool, dry, and well-ventilated area. Keep them locked away from children and animals. Store incompatible chemicals separately to prevent reactions.

# **Use Personal Protective Equipment (PPE):**

Wear appropriate PPE, such as gloves, goggles, respirators, and protective clothing, as indicated by the label and Safety Data Sheet (SDS). Ensure your PPE fits well and is in good condition.

**Mix Safely:** Mix chemicals in well-ventilated areas designated for this purpose. Mix thoroughly according to label instructions.

Avoid Contamination: Clean all equipment before and after use to prevent crosscontamination. Never use food containers for chemical storage or mixing, and wash hands thoroughly after handling chemicals.

Weather Awareness: Pay attention to weather conditions before application. Avoid spraying in windy conditions to prevent drift and be cautious during rain or when rain is expected to prevent runoff.

Emergency Response: Have an emergency plan in place, including the location of emergency equipment and first aid supplies. Know how to respond to spills, or exposure incidents.

Restricted Access: Keep unauthorised personnel, including children and pets, away from areas where chemicals are being stored or applied. Post warning signs when necessary.

Chemical storage areas should be locked to avoid unauthorised access.

Dispose of Chemicals Property: Follow local regulations for chemical disposal. Do not pour leftover chemicals down drains or onto the ground. Use designated disposal sites or contact a hazardous waste disposal service.

**Record Keeping:** Maintain accurate records of chemical use, including dates, rates, and locations. This helps with tracking, compliance, and safety audits.

**Regular Training:** Stay updated with safety training and best practices for chemical handling. Attend refresher courses and encourage your colleagues to do the same.

Communication: Foster open communication with other farm workers regarding chemical use and safety. Ensure everyone is aware of ongoing chemical applications to avoid accidental exposure.

**Report Incidents:** Immediately report any spills, incidents, or health issues related to chemical exposure to your supervisor or appropriate authorities.



# A Practical Guide **Safe Chemical Handling**

# **Training Instruction and Supervision**

Before engaging in any tasks involving chemicals, it is imperative that you receive thorough and comprehensive training. This training should cover various aspects such as understanding the specific chemicals you will be working with, recognising potential hazards, and knowing how to use personal protective equipment effect-ively. Furthermore, clear and concise instructions should be provided for each chemical-related task, outlining safe procedures, emergency protocols, and proper disposal methods.

# Finding Information on Correct Chemical Handling

Even with training, instruction, and supervision, it is important to know how to find and check chemical handling information for yourself. Chemicals come in various forms—solid, liquid, or gas and can be made up of many different types of ingredients. This means that how each chemical needs to be used and handled will be different. Information on how to handle a chemical can be found on the chemical container label or on the chemical's Safety Data Sheet (SDS).

# **Safety Data Sheet (SDS)**

A chemical safety data sheet, often called an SDS, is a detailed document that provides comprehensive inform-ation about a chemical. It's like an instruction manual for safe use. SDS documents are required to have a standard layout. Here's what you'll typically find in each section of an SDS - see Figure 1.

# **Chemical Labels**

A chemical label is like a quick guide to a product. It's typically found on the container of the chemical and provides essential information at a glance.

# **Links and Resources**

Understanding Pesticide Chemical Labels apvma.gov.au auschemtraining.com.au/resources safeworkaustralia.gov.au

# FIGURE 1 Safety Data Sheet Breakdown

### Section 1 Identification

Contains the product identifier or tradename, contact details of the manufacturer or importer responsible for supplying the chemical, and the telephone number to contact in case of an emergency. The information in this section should be consistent with the label.

# Section 2 Hazard(s) identification

Gives details on the potential health and physical hazards of the chemical. This information can be used to help assess the risks to the health and safety of workers, other people, and the environment. May include pictograms.





### Section 3 Composition & information on ingredients

If the chemical is a mixture, this section should provide the information on the identity and proportions of hazardous ingredients in the mixture.

### Section 4 First-aid measures

Describes the necessary first aid measures to be taken in case of an accident.

### Section 5 Fire-fighting measures

Gives specific information on fighting a fire involving the chemical, including the most suitable extinguishing media and other protective measures.

### Section 6 Accidental release measures

Describes what actions need to be taken if there is an accidental release or spill of the chemical to minimise harm to people, property and the environment.

# Section 7 Handling & storage

Contains details on how to handle and store the chemical safely to minimise the potential risks to people, property and the environment.

# Section 8 Exposure controls & personal protection

Provides information on control measures that can be used to reduce exposure, for eg: engineering controls, information on exposure standards & guidance on required personal protective equipment (PPE).

Credit safeworkaustralia.gov.au

# Section 9 Physical & chemical properties

Provides detailed information on the physical and chemical properties of the chemical, for example, appearance, odour, pH, flash point, melting/boiling point or any other relevant physical data.

# Section 10 Stability & reactivity

Contains details of any hazardous reactions that may occur if the chemical is used under certain conditions and details of any incompatible materials.

### Section 11 Toxicological information

Provides detailed information on the toxicological properties of the chemical. This section is used primarily by medical professionals, toxicologists & WHS professionals.

# Section 12 Ecological information

Provides detailed information on the ecological hazard properties of the chemical.

### Section 13 Disposal considerations

Explains how the chemical should be disposed of correctly or recycled or reclaimed.

### **Section 14 Transport information**

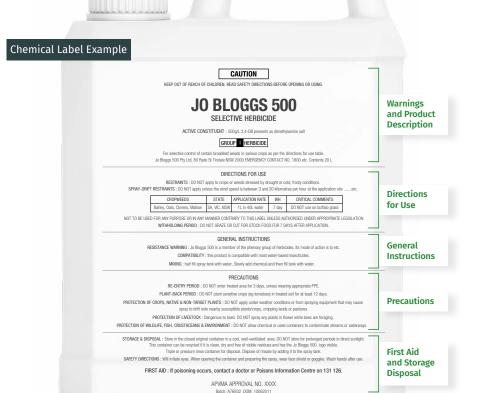
Contains basic classification information like UN number and transport hazard classes and packing groups that relate to the transport of the chemical by road, rail, sea or air.

# Section 15 Regulatory information

Provides advice on other international or national regulatory information specific to the chemical, such as the Montreal protocol (ozone depleting substances), the Stockholm Convention (Persistent organic pollutants), Poisons scheduling or any other applicable Australian prohibition, notification or licensing requirements.

# Section 16 Any other relevant information

Provides any other information relevant to the preparation of the SDS, including the date of its preparation, a key or legend to abbreviations acronyms and references used.





A Practical Guide

# Safe Chemical Handling

# Introduction

- · Welcome everyone.
- Emphasise the importance of safe chemical handling on the farm.
- Mention the objective: to raise awareness and provide practical tips for safe chemical handling.

**Icebreaker** Consider starting with a brief question or scenario related to chemical

handling to engage participants. For example, "Have you ever had a close call when handling farm chemicals, or do you know someone who has?"

**Distribution of Resources** Handout printed Toolbox Talk Information Sheets and any other resources related to farm chemical safety.

# **INSTRUCTIONS**

The information sheet is background information ONLY. Be sure to customise your talk to your operation and facilities.

# How to deliver an effective Toolbox Talk

- Know your Topic. If you don't understand the material it will be hard to explain and make it relevant.
- Print copies of the Toolbox Talk Info sheet for yourself and each of the participants.
- Hold the talk in a location relevant to the topic being discussed.
- Explain why the Toolbox Talk is being held.
- · Stay on topic and keep it simple.
- Encourage conversation and participation.
- Be sure to give real life examples whenever possible.
- · Be open to questions.
- Read through the provided cases studies.
- After each study ask attendees what could have been done to prevent this situation.
- Conclude with a brief review of the main points or a summary based on the discussion.
- Record the details of the Toolbox Talk including the location, date and names of attendees.

# **Key Points**

# **Chemical Labels and SDS**

- Explain that chemical labels and SDSs are like instruction manuals.
- Discuss the importance of reading and understanding this information before using any chemical.
- Highlight where to find key information on a label and on a SDS.

# Personal Protective Equipment (PPE)

- Stress the significance of wearing the right PPE.
- Ensure all workers are aware of where PPE can be located for use.
- Describe common PPE items, including gloves, goggles, and protective clothing.
- Emphasise that PPE should be in good condition and should fit the user.

# **Safe Mixing and Application**

- Discuss the importance of mixing chemicals in well-ventilated areas and following label instructions.
- Explain the importance of checking equipment for leaks, cracks or other defects.
- Explain how to add chemicals to water, not water to chemicals, to prevent splashing.
- Mention the need to calibrate equipment properly for accurate application.

# Storage and Disposal

- Highlight safe storage practices cool, dry, and locked storage areas, and keeping chemicals in their original containers.
- Stress the importance of proper disposal and following local regulations.

# **Emergency Response**

- Talk through the emergency plan, including the location of emergency equipment and first aid supplies.
- Discuss what to do in case of spills, or exposure incidents.



# Interactive Discussion and Case Studies

Encourage participants to share their experiences, challenges, or questions related to farm chemical handling.

Use the Case Studies on the next page to prompt conversation. Read the case studies out loud and ask participants for their thoughts.

# **Q&A Session**

Allow participants to ask questions and seek clarification on any topics covered.

# Conclusion

Summarise the main takeaways from the talk: reading labels, using proper PPE, safe mixing/application, storage, disposal, and emergency response.

Reiterate the importance of everyone's commitment to safety on the farm.

# **Closing Remarks**

Thank participants for their time and attention.

Remind them to apply the knowledge gained from this toolbox talk in their daily work.

# **Feedback**

Ask for feedback on the Toolbox Talk content and delivery to improve future sessions.

a basic structure for conducting a Toolbox Talk. Customise it as needed to suit your specific audience and objectives. Always prioritise safety and ensure that participants have a clear understanding of the information presented.

**Note:** This Facilitator Guide is intended to provide





# TUDIES



# **DOWNLOAD ONLINE MATRIX**

Use this simple and effective tool to assess and manage the risk of your farming activities prior to commencing.

All team members can join in and contribute, developing different ways to manage risks on your farm. Doing a risk assessment helps determine hazards and develop appropriate control measures to lessen risks.

# farmsafe.org.au

P. +61 2 6269 5622 | E. info@farmsafe.org.au

Disclaimer: This Toolbox Talk is intended as a general guide only and is designed to be used to increase risk awareness and safe work practices - it is not legal advice and does not take the place of proper individualised on-farm workplace inductions, work, health and safety training, or any other tailored steps which may be necessary to protect health and safety at specific worksites.

# CASE STUDY 1 Mysterious Chemical Spill

### Scenario

One sunny morning on the farm, a farmhand with little knowledge about chemicals was walking near a storage area. They noticed an unusual, colorful liquid oozing from a container on a nearby shelf. Not knowing much about chemicals, they felt something was wrong and immediately telephoned their supervisor to report the spill.

QUESTION	ANSWER
The supervisor wants to know the name of the chemical in the leaking container. Where should they look for this information?	This information can be found on the label.
If there is no label on the container that the liquid is leaking from; should the liquid be treated as a chemical?	Yes. Chemical-handling precautions should be taken be taken.

# CASE STUDY 2 Chemical Spill During Mixing

# Scenario

A seasoned farm worker was tasked with handling a new chemical for pest control, but they were unsure about its potential hazards. They picked up the chemical container and noticed a pictogram on the label depicting a skull and crossbones.

QUESTION	ANSWER
The worker has used a chemical with the same pictogram before. Should they go ahead and use the same handling and mixing instructions that they used with the other chemicals?	No. All chemicals are different and may require different handling and mixing steps. The label and the SDS should be consulted for appropriate handling and mixing.
Where should they look for more information on the hazards of this particular product and how it should be handled?	This information is contained in the SDS.
What section of the SDS contains Handling and Storing information?	Section 7 of the SDS has Handling and Storage Information.

# **CASE STUDY 3** Chemical Spill on Exposed Skin

# Scenario

During a routine task of mixing fertilisers, a farm worker accidentally knocked over a container, causing a sudden splash of liquid fertiliser onto their clothing and exposed skin.

QUESTION	ANSWER
<ul> <li>What should they do?</li> <li>A. Ignore it. It will dry on its own.</li> <li>B. Give their skin a quick rinse and keep performing their task.</li> <li>C. Follow First Aid and Spill instructions provided in the SDS and report the spill.</li> </ul>	C - Follow First Aid and Spill instructions provided in the SDS and report the spill.
Where are First Aid instructions found in a SDS?	Section 4 of the SDS has Handling and Storage Information
Where are spill instructions found in a SDS?	Section 6 of the SDS contains information on the Accidental Release measures.



# **Toolbox Talks**Facilitator Guide

# **INSTRUCTIONS**

This sign-off template is available for you to use as part of your training packages. You will need to attach all evidence of all information given to the person that you have spoken with regarding this specific Toolbox Talk. This may include checklists, policies, safe operating procedures or notes about the conversations had, questions asked and other information provided.

Holding Toolbox Talks or safety meetings are not just about checking a box - they need to be tailored to your farming environment, meet the legislative requirements, and designed to support your employee, contractor, family member or visitor throughout the time that they spend living or working on your property. Inductions are only the first step in your WHS journey and it is important that you continue to create a safety culture on your farm by continuing to engage with your employees on any matters that may affect their health, safety and wellbeing.

The employee/contractor/visitor/family member that you have had this conversation with should acknowledge that they have received, discussed and understood all the relevant information that has been presented to them and attached and sign in the relevant space provided. A good practice is to ensure that the employee initials or signs each relevant piece of information that is attached and retains a copy of each for their own information. Records of WHS conversations should be kept alongside records of employment or in your work, health and safety management system and be updated as needed or as required by law.

A Practical Guide

# **Safe Chemical Handling**

policies, safe operating procedures, etc.

# On-farm Toolbox Talk Sign-off Sheet

Please list and/or attach all documents that have been provided including checklists,

n-fa	rm Toolbox Talk Participants
EMPLO	DYER - DETAILS
	I confirm that I have provided a relevant safety meeting to our farming business and that the employee has received, discussed and understood the listed and attached information.
Given I	lame(s)
Surnan	ne
Proper	ty Name
Date	
Signati	ire
1. EM	PLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER - DETAILS
	I confirm that I have received, discussed and understood all information that has been listed and attached to this document.
Given I	lame(s)
Surnan	ne
Proper	ty Name
Date	
Signati	ıre



# **Toolbox Talks**Facilitator Guide

A Practical Guide **Safe Chemical Handling** 

# **On-farm Toolbox Talk**

Sign-off Sheet

CONTINUED



This project is supported by the Department of Agriculture, Fisheries and Forestry (DAFF), through funding from the Australian Government's National Farm Safety Education Fund.

I confirm that I have received, discussed and understood all information that has been listed and attached to this document.
Given Name(s)
Surname
Property Name
Date
Signature
3. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER - DETAILS
I confirm that I have received, discussed and understood all information that has been listed and attached to this document.
Given Name(s)
Surname
Property Name
Date
Signature
4. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER - DETAILS
I confirm that I have received, discussed and understood all information that has been listed and attached to this document.
Given Name(s)
Surname
Property Name
Date
Signature
5. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER - DETAILS
I confirm that I have received, discussed and understood all information that has been listed and attached to this document.
Given Name(s)
Surname
Property Name
Date
Signature

2. EMPLOYEE / CONTRACTOR / VISITOR / FAMILY MEMBER - DETAILS