



Australian Government

Department of Education, Employment and Workplace Relations

AHCSP0305A Operate seed treatment machinery

Release: 1

AHCSP0305A Operate seed treatment machinery

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of applying a range of treatments or modifications to seed and defines the standard required to: set up and prepare seed treatment machinery for use; operate seed treatment machinery; complete and report on seed treatment machinery and equipment operation.
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Application of the Unit

Application of the unit	This unit relates to operating seed modification or seed treatment machinery and equipment such as coating and pelleting machinery and chemical treatment machinery.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Select and prepare seed treatment machinery and equipment for use	1.1. Seed treatment machinery and equipment is selected and prepared to job requirements and confirmed against work plan. 1.2. Routine pre-operational checks of seed treatment machinery and equipment are completed to manufacturers' specifications and enterprise requirements. 1.3. Occupational Health and Safety (OHS) hazards in the workplace are recognised, risk assessed and minimised according to enterprise requirements.
2. Operate seed treatment machinery and equipment	2.1. Seed treatment machinery and equipment is operated in a safe and controlled manner and monitored for performance and efficiency. 2.2. Risks to self, others and the environment are anticipated and minimisation strategies implemented accordingly. 2.3. Suitable personal protective clothing and equipment is selected, used, maintained and stored according to OHS requirements. 2.4. Environmental implications associated with seed treatment machinery operation are identified, assessed and reported to the supervisor.
3. Complete and report on seed treatment machinery and equipment operation	3.1. Shut-down procedures for seed treatment machinery and equipment are completed to manufacturers' specifications and enterprise requirements. 3.2. Seed treatment machinery and equipment operational records are completed and maintained according to enterprise requirements. 3.3. Malfunctions, faults, observations of irregular performance and damage to seed treatment machinery and equipment are detailed and reported according to enterprise requirements. 3.4. Seed treatment machinery and equipment is cleaned, secured and stored according to OHS and enterprise requirements.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- operate seed treatment machinery and equipment
- formulate a chemical mix to achieve the best practice
- calculate, calibrate and measure dose rates
- apply powders and thickeners
- identify and understand seed dryers and their expectations and limitations
- identify different types of seed coating machines
- use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- difference between coating and pelleting [<5% weight gain film coating (insecticide/fungicide) or >5% weight gain is pelleting]
- chemical types and classes
- hazards of chemicals
- Personal Protective Equipment (PPE)
- the expectations and limitations of different types of seed coating machines
- the labelling requirements associated with coated seed.
- the use and differences in biological components in seed coatings
- the interaction of biological components and their effect on other chemicals, powders, polymers and heat
- confined space working hazards
- rules and regulations for storage, transportation and bunding
- types of seed treatment machinery and equipment
- basics of programmable logic controller / treatment control systems and electrical process.
- methods of applying chemical and basic recipe formula
- methods of applying powders and thickeners
- disposal of waste chemical
- procedures for drying, scalping and aspiration of treated seed.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

In order to confer competency, evidence must prove that the candidate is able to:

- set up and prepare seed treatment machinery for use
- operate seed treatment machinery, and
- complete and report on seed treatment machinery and equipment operation.

Context of and specific resources for assessment

Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole.

Seed treatments may include:

- all forms of commercial seed treatment from very basic spray pack application of insecticide for stored grain pests through to all configurations of continuous, batch and rotary machines
- for example:
 - hand held spray packs
 - slurry treaters
 - spray pumps
 - direct seed coaters
 - mist-a-matic
 - batch treaters
 - Panagen
 - rotary coaters
 - coating pans

RANGE STATEMENT	
	• driers • cement mixers.
Machinery and equipment may include:	• all machinery and equipment used to apply treatments to seed including but not exclusive to: • fungicides • insecticides • biologicals • colours and polymers • powders and coating mediums • any variation of these machines, with or without additions to enhance performance.

Unit Sector(s)

Unit sector	Seed processing
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Co-requisite units

Co-requisite units	

Competency field

Competency field	
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