



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MSL934003A Maintain and control stocks**

**Revision Number: 1**

## MSL934003A Maintain and control stocks

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to order, maintain and control the use of laboratory materials and/or equipment in the work area.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to technicians and technical officers working in all industry sectors.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Maintain and control stocks of materials or equipment	1.1. Label, document and store stocks in accordance with relevant standards and specific safety requirements 1.2. Follow stock rotation procedures to maximise use of stocks within permitted shelf life 1.3. Identify stock discrepancies and replace redundant or outdated stocks to maintain stocks at prescribed level 1.4. Identify and replace damaged/worn equipment or arrange for repairs or disposal as appropriate 1.5. Initiate quality control sampling and testing procedures when appropriate 1.6. Report stock problems outside own knowledge and authority limitations to relevant personnel
2. Order and receive materials and equipment	2.1. Determine requirements of customers and suppliers using appropriate communication and interpersonal skills 2.2. Determine demand for stock, taking into account peak and seasonal variations in stock usage and production conditions 2.3. Place and/or follow up approved orders using enterprise systems and procedures 2.4. Check condition of received goods and take appropriate action
3. Maintain stock records	3.1. Record all relevant details accurately using the specified forms/computer system 3.2. Ensure that written information is legible and indelible 3.3. File all records in the designated place
4. Maintain a safe work environment	4.1. Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel 4.2. Minimise the generation of wastes and environmental impacts 4.3. Ensure the safe collection of redundant/outdated stocks for subsequent disposal

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

Required skills include:

- maintaining and controlling stocks or materials and equipment
- ordering and receiving materials and equipment
- maintaining stock records
- maintaining a safe work environment

#### Required knowledge

Required knowledge includes:

- technical terminology relating to ordering and storage of stocks
- laboratory stock, product and service information
- types of chemical reactions and rationale for recommended storage systems
- enterprise procedures and quality system requirements for stock control
- codes of practice and regulations concerning the handling, storage and transport of the stock involved
- relevant health, safety and environment requirements

## 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

Assessors should ensure that candidates can:

- confirm customer requirements with senior personnel where there is doubt
- access online databases and/or catalogues efficiently
- interpret labelling information (lot number, batch and date) and MSDS correctly
- apply procedures for safe handling, storage and transport of stocks
- use required safety and manual handling equipment and procedures
- perform quality controlsampling and testing and rotate stock in accordance with SOPs
- follow workplace procedures for predicting and/or determining demand for stock
- maintain stock at prescribed levels for their work area, through regular inspections, timely ordering of replacement items and followup of late orders
- cope with peak and seasonal variations in stock usage and production conditions
- follow workplace procedures for researching, ordering and receipt of stock
- complete and record all documentation accurately
- demonstrate effective and appropriate communication and interpersonal skills when dealing with customers and suppliers.

#### Context of and specific resources for assessment

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with:

- *MSL935004A Maintain instruments and equipment.*

Resources may include:

- stocks of materials and equipment
- stock order forms and documentation
- sampling and testing equipment.

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• review of documentation for orders prepared by the candidate</li> <li>• examination of stock records maintained by the candidate</li> <li>• observation of the candidate handling stock and conducting quality control sampling and testing</li> <li>• feedback from the laboratory manager, quality manager, customer service manager, supervisor, customers and peers</li> <li>• explanation by the candidate of the labelling and storage requirements of a selection of stock items.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting.</p> <p><b>Biotechnology</b></p> <p>A technical officer arrived at work on Monday morning and discovered that the freezer had been turned off over the weekend and the restriction nucleases had thawed. These enzymes were to be used that morning. The technician needed to check the enzyme activity to determine whether the enzymes had been denatured by the rise in temperature. The technician quickly set up a digestion mix of affected enzyme with some viral DNA of known sequence. The digest produced DNA fragments of expected length, showing the enzyme still had activity.</p>

**EVIDENCE GUIDE**

The technician reported the incident along with the results to the supervisor, who decided that the enzymes could be used for that day.

**Manufacturing**

Neglected chemicals may deteriorate on the shelf and turn into a completely different entity. Not only can this change in identity damage a chemical manufacturing process, it can also present an immediate hazard. For example, this occurred in a storeroom where stored ether built up high levels of peroxides. When it was used in an extraction process to make a starting material in a manufacturing process, the peroxides were concentrated and exploded. The company was fortunate that loss of life didn't occur. The company revised enterprise procedures to ensure that in the future, redundant or outdated stocks are identified and removed.

**Food processing**

The staff in a confectionary company laboratory use enzyme based methods to routinely analyse sugars (glucose, fructose, sucrose and lactose) in products. Although the enzymes are stored as directed by the manufacturer, typically at -20(C in the dark, they do not retain their activity indefinitely. To avoid using inactive enzyme in an analytical procedure and obtaining a reduced or false negative result, several features of each enzyme preparation are routinely noted. These include the date of purchase, the number of times the enzyme has been thawed and refrozen and its initial activity. Periodically, the enzyme activity is verified and stock is discarded where its activity has fallen to a less than acceptable value. These practices ensure that the analytical methods that use enzymes are performed with functional reagents and give accurate results.



## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

#### Codes of practice

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

#### Standards, codes, procedures and/or enterprise requirements

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards such as:
  - AS 1678 Emergency procedure guide - Transport
  - AS 1940-2004 Storage and handling of flammable and combustible liquids
  - AS 3780-2008 The storage and handling of corrosive substances
  - AS 4332-2004 The storage and handling of gases in cylinders
  - AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
  - AS/NZS 1269 Set:2005 Occupational noise management set
- AS/NZS 2243 Set:2006 Safety in laboratories set
  - AS/NZS 2982.1:1997 Laboratory design and construction - General requirements
  - AS/NZS 4452:1997 The storage and handling of toxic substances
  - AS/NZS ISO 14000 Set:2005 Environmental management standards set
- animal welfare legislation and codes of practice
- Australian code of good manufacturing practice for medicinal products (GMP)
- Australian Dangerous Goods Code
- Australian Quarantine and Inspection Service

<b>RANGE STATEMENT</b>	
	<p>(AQIS) Export Control (Orders) Regulations 1982</p> <ul style="list-style-type: none"> <li>• Australian Quarantine and Inspection Service (AQIS) Import Guidelines</li> <li>• Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Codes of Practice</li> <li>• customer database and supplier catalogues</li> <li>• enterprise or standard operating procedures (SOPs)</li> <li>• equipment manuals and warranty, supplier catalogues and handbooks</li> <li>• gene technology regulations</li> <li>• internal/external stock orders and overdue actions</li> <li>• material safety data sheets (MSDS)</li> <li>• National Code of Practice for the labelling of workplace substances (NOHSC:2012 (1994))</li> <li>• National Environment Protection Measures</li> <li>• National Health and Medical Research Council (NHMRC) Guidelines</li> <li>• national measurement regulations and guidelines</li> <li>• occupational health and safety (OHS) national standards and codes of practice</li> <li>• principles of good laboratory practice (GLP)</li> <li>• Therapeutic Goods Regulations 1009</li> </ul>
<b>Workplace procedures</b>	<p>Workplace procedures may include:</p> <ul style="list-style-type: none"> <li>• ordering, purchase and receipt of stocks</li> <li>• verification of temperature control for delivered and stored stocks (e.g. reagents containing enzymes)</li> <li>• organisation of compatible batch or lot numbers</li> <li>• storage of stocks, stock control and rotation of stock</li> <li>• quality control testing, monitoring of use by dates of standards and shelf life of reagents (e.g. DNA, enzymes, antibodies, radioisotopes and vitamins)</li> <li>• reporting non-conformances</li> </ul>
<b>Records</b>	<p>Records could include:</p>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• stock usage</li> <li>• orders and progress of orders</li> <li>• equipment servicing and repairs</li> <li>• current inventories</li> <li>• quality control sampling, testing and stock rotation</li> </ul>
<b>Communication</b>	<p>Communication may require the use of equipment or systems, such as:</p> <ul style="list-style-type: none"> <li>• telephone, fax, email and mail</li> <li>• online information systems, inventories, print records, databases and catalogues</li> <li>• filing systems</li> </ul> <p>Communication may involve::</p> <ul style="list-style-type: none"> <li>• suppliers</li> <li>• freight companies</li> <li>• internal customers</li> <li>• external customers</li> </ul>
<b>Hazards</b>	<p>Hazards may include:</p> <ul style="list-style-type: none"> <li>• electric shock</li> <li>• chemicals, such as acids and hydrocarbons</li> <li>• microbiological organisms associated with blood and blood products</li> <li>• radioisotopes</li> <li>• sharps, such as broken glassware</li> <li>• disturbance or interruption of services</li> <li>• manual handling of heavy boxes</li> <li>• fluids under pressure and industrial gas bottles</li> </ul>
<b>Safety procedures</b>	<p>Safety procedures may include:</p> <ul style="list-style-type: none"> <li>• use of personal protective equipment, such as hearing protection, gloves, safety glasses, coveralls and safety boots</li> <li>• ensuring access to service shut-off points</li> <li>• handling and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, and enterprise procedures and regulations</li> <li>• regular cleaning of equipment and work areas</li> </ul>
<b>Occupational health and safety (OHS) and environmental</b>	OHS and environmental management

**RANGE STATEMENT****management requirements**

requirements:

- all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time
- all operations assume the potentially hazardous nature of samples and require standard precautions to be applied
- where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health

**Unit Sector(s)**

<b>Unit sector</b>	Maintenance
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**Competency field**

<b>Competency field</b>	
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**Co-requisite units**

<b>Co-requisite units</b>		