



Australian Government

MSL924001 Process and interpret data

Release: 2

MSL924001 Process and interpret data

Modification History

Release 1. Supersedes and is equivalent to MSL924001A Process and interpret data

Application

This unit of competency covers the ability to retrieve data, evaluate formulae and perform scientific calculations, present and interpret information in tables and graphs and keep accurate records. The unit requires personnel to solve problems of limited complexity where the information may be less obvious, but not contradictory, and can be determined by direct reasoning.

This unit of competency is applicable to laboratory assistants, field/laboratory technicians and instrument operators in all industry sectors.

While no specific licensing or certification requirements apply to this unit at the time of publication, laboratory operations are governed by relevant legislation, regulations and/or external accreditation requirements. Local requirements should be checked.

Pre-requisite Unit

Nil

Competency Field

Data

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|---|--------------------------------|-----|---|
| 1 | Retrieve and check data | 1.1 | Store and retrieve data using appropriate files and/or application software |
| | | 1.2 | Verify the quality of data using workplace procedures |
| | | 1.3 | Rectify errors in data using workplace procedures |
| 2 | Calculate | 2.1 | Calculate statistical values for given data |

	scientific quantities	2.2	Calculate scientific quantities using given formulae and data and estimate uncertainties
		2.3	Ensure calculated quantities are consistent with estimations and expectations
		2.4	Report all calculated quantities using the appropriate units and correct number of significant figures
3	Present data	3.1	Present data in clearly labelled tables, charts and graphs
		3.2	Graph data using appropriate scales to span the range of data or display trends
		3.3	Report all data using the appropriate units and number of significant figures
4	Interpret data	4.1	Interpret significant features of tables, charts and graphs, including gradients, intercepts, maximum and minimum values, and limit lines
		4.2	Recognise and report trends in data
5	Keep accurate records and maintain confidentiality	5.1	Transcribe information accurately
		5.2	Verify the accuracy of records following workplace procedures
		5.3	File and store workplace records in accordance with workplace procedures
		5.4	File all reference documents logically and keep them up-to-date and secured
		5.5	Observe workplace confidentiality standards

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Standards, codes, procedures and/or workplace requirements

Standards, codes, procedures and/or enterprise requirements include the latest version of one or more of:

- Australian and international standards, guides and the National Association of Testing Authorities (NATA) Technical Notes that cover the application of international system of units (SI), accuracy of measurement methods and results, and quantifying uncertainty in measurement
- national measurement regulations and guidelines
- validated sampling and test procedures and spreadsheets developed in-house for assay and process calculations where applicable
- workplace procedures, manuals and/or plans covering quality assurance, customer service, material safety data sheets (MSDS), equipment, supplier catalogues and handbooks

Data

Data includes:

- worksheets, spreadsheets and/or databases linked to information management systems
- results of observations, tests and measurements, analyses, surveys and/or quality assurance and control assessments
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Calculations

Calculations are performed with or without a calculator and using computer software, spreadsheets, databases and statistical packages

Records

Records include information associated with one or more of:

- purchase of equipment and materials, service records
- safety procedures
- history of calibration and test results

Work health and safety (WHS) and

WHS and environmental management requirements include:

- complying with WHS and environmental management

**environmental
management
requirements**

requirements at all times, which may be imposed through state/territory or federal legislation. These requirements must not be compromised at any time

- applying standard precautions relating to the potentially hazardous nature of samples
- accessing and applying current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health, where relevant

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSL924001A Process and interpret data

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b75f4b23-54c9-4cc9-a5db-d3502d154103>