



Australian Government

MSL963001 Operate basic handblowing equipment

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MSL963001A Operate basic handblowing equipment

Application

This unit of competency covers the ability to operate handblowing equipment to perform basic glasswork. Personnel may be less experienced workers working under the guidance of an experienced scientific glassblower.

This unit of competency is applicable to personnel working with experienced scientific glassblowers, generally in scientific educational institutions.

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

Scientific glassblowing

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1 Prepare for handblowing operations	1.1	Identify job, appropriate procedure, hazards and safety requirements
	1.2	Use safety equipment, safety procedures and personal protective equipment (PPE) specified for the job and materials to be used
	1.3	Record description of the job to be undertaken, compare with specification and report any variations

- 1.4 Select and prepare tools and equipment in accordance with job requirements
 - 1.5 Identify glass stocks and components required for the job
- 2 **Follow sequence of operations for glasswork procedure to be performed**
 - 2.1 Prepare glass stocks and components as required for the job
 - 2.2 Check and adjust equipment and tools for the job as applicable
 - 2.3 Start up equipment using workplace procedures
 - 2.4 Carry out glasswork procedure using the appropriate standard method
 - 2.5 Monitor process and rectify routine problems
 - 2.6 Follow equipment shutdown procedures
- 3 **Use annealing equipment**
 - 3.1 Prepare annealing equipment for the job
 - 3.2 Start up, operate and shut down annealing equipment using workplace procedures
 - 3.3 Monitor, adjust and record annealing operation
 - 3.4 Rectify routine problems
- 4 **Maintain a safe work environment**
 - 4.1 Follow established safe work practices to ensure own safety and that of others
 - 4.2 Minimise the generation of wastes
 - 4.3 Ensure the safe disposal of wastes
 - 4.4 Clean, care for and maintain work area, equipment and tools
 - 4.5 Report any hazards or incidents according to workplace procedures

- 5 **Maintain records**
 - 5.1 Record data in accordance with workplace requirements
 - 5.2 Maintain equipment logs in accordance with workplace requirements
 - 5.3 Maintain security and confidentiality of workplace information

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 workplace requirements include the latest version of one or more of:

- Australian and international standards covering the requirements for the laboratory safety; quality and environmental management; and labelling, storage, handling and transport of hazardous materials
- national work health and safety (WHS) standards and codes of practice
- specific codes, guidelines and procedures, such as principles of good laboratory practice (GLP)
- workplace documents, such as standard operating procedures (SOPs); quality and equipment manuals; maintenance schedules; material safety data sheets (MSDS); safety procedures; material, production and product specifications; production and laboratory schedules; workplace recording and reporting procedures; and waste minimisation and safe disposal procedures

Hazards

Hazards include, but are not limited to, one or more of:

- glass dust
- sharps and broken glassware
- heat sources, such as burners and ovens
- fluids under pressure (acetylene and oxygen)
- cuts associated with glass grinders and cutters
- manual handling of heavy bags and containers

Safety procedures

Safety procedures include, but are not limited to, one or more of:

- ensuring access to service shut-off points
- recognising and observing hazard warnings and safety signs
- correct labelling of samples and hazardous materials
- extracting dust
- following established manual handling procedures
- handling and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer instructions, and workplace procedures and regulations
- regular cleaning and/or decontamination of equipment and work areas

- using PPE, such as heat resistant gloves, safety glasses, goggles, face guards, coveralls, respirators and safety boots

WHS and environmental management requirements

WHS and environmental management requirements include:

- complying with WHS and environmental management 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

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Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>