



Australian Government

Assessment Requirements for MSL973028

Perform microscopic examination

Release: 1

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Modification History

Release 1. Supersedes and equivalent to MSL973019 Perform microscopic examination. Unit refocused on using the microscope with general content covered in other units removed. Significant simplification of Performance Evidence for clarity.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- set up a microscope for Köhler illumination on 10x, 40x and 100x magnification on at least 3 occasions
- safely prepared, examined, and taken basic measurements and/or recorded observations of different sample types, including 3 of the following:
 - stained smear or film with a monolayer of cells
 - wet mount
 - sample in a counting chamber
 - hand-cut samples.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- types of samples, sample preparation methods, methods of examination and associated hazards relating to the job role
- parts and functions of a light microscope and steps taken to optimise the resolution of images
- procedures and reporting requirements for spills, faulty or unsafe equipment, hazards and incidents
- causes and basic troubleshooting of common artefacts or incorrect results in microscopy
- vernier measurement and micrometry techniques
- sample characteristics restricted to what can be viewed by light microscopy, including:
 - shape and size of particles
 - presence of contamination
 - colour
 - number of cells
 - type of cells
 - colour/staining and morphology

- applications of different types of microscopes/setups including compound light, dark field, phase contrast, fluorescent, electron, polarising and stereomicroscope (dissecting)
- traceability requirements
- legal, ethical and work health and safety (WHS) requirements specific to the work task.
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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - a standard laboratory equipped with appropriate equipment, including light microscopes, samples and materials
 - workplace procedures.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

MSL Laboratory Operations Companion Volume Implementation Guide is available from VETNet – -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>