



Australian Government

Department of Education, Employment and Workplace Relations

MEM08009C Make up solutions

Release: 1

MEM08009C Make up solutions

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers making up solutions and maintaining process specific equipment, such a probes and electrodes.
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Application of the Unit

Application of the unit	<p>This unit applies to standard operational procedures for solution preparation including compliance with standards, codes, legislation, company and customer requirements. Maintenance of solution ratio and purity is covered by other units.</p> <p>This unit should not be selected if Unit MEM08018B (Electroplate engineering coatings), Unit MEM08019B (Electroplate protective finishes) and/or Unit MEM08020B (Electroplate decorative finishes) has already been selected.</p> <p>Band: A</p> <p>Unit Weight: 2</p>
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM13003B	Work safely with industrial chemicals and materials

Employability Skills Information

Employability skills	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. Prepare solution	1.1. Appropriate solutions for application requirements or specifications are identified. 1.2. Volumes, density and solution concentration are calculated for effective operation. 1.3. Suitable volume of solution is made up from supplier's instructions and/or manual in accordance with standard operating procedures. 1.4. Spent solutions are referred to waste treatment processing in accordance with standard operating procedures.
2. Maintain process specific equipment	2.1. Inspection of probes and electrodes is carried out and meter probes are recalibrated as required.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Look for evidence that confirms skills in:

- preparing operational plan
- calculating volumes and determining quantities required
- preparing appropriate solutions
- inspecting probes and electrodes
- calibrating meter probes
- reading and interpreting routine information on written job instructions, specifications and standard operating procedures. May include drawings
- following oral instructions
- undertaking calculations using formulae
- entering routine and familiar information onto proformas and standard workplace forms

Required knowledge

Look for evidence that confirms knowledge of:

- reasons for selecting chosen sequence of operations
- solution concentrations

REQUIRED SKILLS AND KNOWLEDGE

- procedures for making up solution
- procedures for inspecting probes and electrodes
- procedures for recalibrating meter probes
- the equipment and techniques necessary to recalibrate meter probes
- use and application of personal protective equipment
- safe work practices and procedures
- relevant hazards and control measures related to the competency

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
Overview of assessment	<p>A person who demonstrates competency in this unit must be able to make up solutions and maintain process specific equipment. Competency in this unit cannot be claimed until all prerequisites have been satisfied.</p>
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.</p>
Context of and specific resources for assessment	<p>This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with making up solutions or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
Method of assessment	<p>Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.</p>
Guidance information for	

EVIDENCE GUIDE**assessment****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. **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.

Unit Sector(s)

Unit sector	
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Co-requisite units

Co-requisite units		

Competency field

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