



Australian Government

MEM26010 Store and handle composite materials

Release: 1

MEM26010 Store and handle composite materials

Modification History

Release 1. Supersedes and is equivalent to MEM26010A Store and handle composite materials

Application

This unit of competency defines the skills and knowledge required to recognise hazards, shelf life, commercial and other issues controlling appropriate storage and handling of materials used to make composites.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: A

Unit Weight: 2

Pre-requisite Unit

MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

Competency Field

Composites

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1	Identify properties and characteristics of materials used	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Select and use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	List all materials used on site

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
		1.5	Interpret safety data sheet (SDS) for each material
		1.6	Identify relevant manual handling issues
		1.7	Identify and define environmental hazards for each material
		1.8	Categorise materials into groups based on their hazards and determine appropriate hazard controls
2	Identify key factors effecting storage and handling	2.1	Identify requirements for dangerous goods licence
		2.2	Identify environmental regulation requirements
		2.3	Identify usage patterns and frequencies
		2.4	Identify cost sensitivity to volume purchased
		2.5	Identify shelf life
3	Determine appropriate storage and handling protocols	3.1	Check manufacturer's storage and handling recommendations/requirements
		3.2	Check SDS and dangerous goods/Environment Protection Agency (EPA)/WHS requirements
		3.3	Check company usage requirements
		3.4	Resolve conflicts between different requirements
		3.5	Prepare storage and handling procedure for materials
4	Store and handle materials in accordance with protocols	4.1	Identify and control hazards
		4.2	Use required handling aids
		4.3	Move and store materials in accordance with procedures
		4.4	Monitor storage and handling of materials and identify areas for improvement and take appropriate action, as required

Elements describe the essential outcomes.

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

- 4.5 Complete any required documentation/reporting according to SOPs

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

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.

Materials include one (1) or more of the following:

- resins
- catalysts
- promoters
- solvents
- reinforcing
- cores
- fillers
- pigments
- mould release
- other materials used directly or indirectly in making products

Dangerous goods licence includes the following:

- the dangerous goods licence conditions can vary between states/territories and councils but will typically cover conditions related to:
 - fire
 - storage
 - the fee payable

Environmental regulations include the following:

- trade waste
- atmosphere
- other wastes
- other emissions

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.

Hazard controls include the following:

- elimination
- substitution
- isolation
- engineering controls
- administration controls

Storage hazards include the following:

- chemical hazards (e.g. fire)
- physical hazards (e.g. manual handling)
- cost hazards (e.g. economic purchasing quantity *versus* shelf life)
- efficiency hazards (e.g. having the material where you need it when you need it)

Areas for improvement include one (1) or more of the following:

- conflicting requirements
- inadequate storage facilities

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM26010A Store and handle composite materials

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>

Assessment Requirements for MEM26010 Store and handle composite materials

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting safety data sheets (SDS), formulas/recipes, batch sheets for storing and handling composite materials
- listing all materials on site
- identifying all hazards and implementing appropriate hazard control measures based on the hierarchy of control
- moving materials using appropriate manual handling techniques and mechanical handling devices to appropriate storage site in accordance with procedures
- completing all documentation and reports, including items requiring further action, in accordance with SOPs.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- SDS and product data sheets
- current state/territory work health and safety (WHS) legislation, standards and codes of practice relevant to the handling and storage of composite materials
- the hierarchy of hazard control measures
- material registers (e.g. set up hazardous goods register, maintain it and use it)
- bunding and ventilation
- handling and storage and impact on product
- contamination (e.g. from water)
- storage temperature (e.g. low temperature for catalyst).

Assessment Conditions

- Assessors must:

- have vocational competency in storing and handling composite materials at least to the level being assessed with relevant industry knowledge and experience
- satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

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