



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **AURV329603DA Apply air dry and polyurethane enamel refinishing materials**

**Release: 1**

## AURV329603DA Apply air dry and polyurethane enamel refinishing materials

### Modification History

Not Applicable

### Unit Descriptor

|                        |                                                                                                                                                                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Unit descriptor</b> | This unit covers the competence required to apply air dry and polyurethane enamel refinishing materials to a variety of vehicle substrates by spray gun application and determine causes and rectification procedures for paint finish faults. |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Application of the Unit

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application of the unit</b> | <p>The unit includes identification and confirmation of work requirement, preparation for work, application of materials, the rectification of faults and completion of work finalisation processes, including clean-up and documentation.</p> <p>Work requires individuals to demonstrate judgement and problem-solving skills in managing own work activities and contributing to a productive team environment.</p> <p>Work is carried out in accordance with award provisions.</p> |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Licensing/Regulatory Information

Not Applicable

### Pre-Requisites

|                           |  |  |
|---------------------------|--|--|
| <b>Prerequisite units</b> |  |  |
|                           |  |  |
|                           |  |  |

## Employability Skills Information

|                             |                                          |
|-----------------------------|------------------------------------------|
| <b>Employability skills</b> | This unit contains employability skills. |
|-----------------------------|------------------------------------------|

## 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. |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Elements and Performance Criteria

| ELEMENT                                                                     | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Prepare for work                                                         | 1.1. Work instructions are used to determine the job requirements, including job sheets, material type, colour, quality and quantity.<br>1.2. Job specifications are read and interpreted.<br>1.3. OH&S requirements, including personal protection needs, breathing apparatus and full body protection, are observed throughout the work.<br>1.4. Materials are selected and inspected for quality.<br>1.5. Hand tooling and safety equipment are identified and checked for operation.<br>1.6. Procedures are determined to minimise waste material.<br>1.7. Procedures are identified for maximising energy efficiency while completing the job.                                                                                                                                       |
| 2. Identify paint faults, causes and rectification procedures               | 2.1. Paint faults are identified according to industry and workplace procedures.<br>2.2. Paint fault causes are determined according to industry and workplace procedures.<br>2.3. Rectification procedures are determined according to fault and type of finish material according to industry standard practices and workplace requirements.<br>2.4. Identification and determination activities are carried out according to industry regulations/guidelines, OH&S legislation, and enterprise procedures/policies.                                                                                                                                                                                                                                                                    |
| 3. Apply air dry and polyurethane enamel refinishing materials by spray gun | 3.1. The environment for application of refinishing materials conforms to requirements for temperature, extraction of fumes and cleanliness.<br>3.2. Refinishing materials are applied at manufacturer/component supplier recommended intervals using approved methods.<br>3.3. Refinishing materials are dried using approved methods and equipment.<br>3.4. Refinishing materials are applied without causing damage to any component or system.<br>3.5. The finish produced meets specifications for colour, texture, depth and gloss and is contaminant-free.<br>3.6. Surface refinishing is completed within approved timeframes.<br>3.7. Application activities are carried out according to industry regulations/guidelines, OH&S legislation, and enterprise procedures/policies. |
| 4. Clean up work area                                                       | 4.1. Material that can be reused is collected and stored.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| ELEMENT                | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| and maintain equipment | <p>4.2. Waste material is removed and disposed of or stored according to statutory and workplace procedure.</p> <p>4.3. Spray equipment is cleaned as specified by manufacturer/ component supplier and/or workplace policy and procedures.</p> <p>4.4. Work area is cleaned and inspected for serviceable condition in accordance with workplace procedures.</p> <p>4.5. Unserviceable equipment is tagged and faults identified in accordance with workplace procedures.</p> <p>4.6. Operator maintenance is completed in accordance with manufacturer/component supplier specifications and worksite procedures.</p> <p>4.7. Tooling is maintained in accordance with workplace procedures.</p> |

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- collect, organise and understand information related to work orders, plans and safety procedures for applying air dry and polyurethane enamel refinishing materials
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with worksite supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including preparation and layout of worksite and obtaining of equipment and materials to avoid backtracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- establish safe and effective work processes which anticipate and/or resolve problems and downtime, to systematically develop solutions to avoid or minimise reworking and avoid wastage
- use mathematical ideas and techniques to calculate time, apply accurate measurements, calculate material requirements and establish quality checks
- use workplace technology related to application of air dry and polyurethane enamel refinishing materials, including the use of specialist equipment, measuring equipment and communication devices and the reporting/recording of results

**REQUIRED SKILLS AND KNOWLEDGE****Required knowledge**

A working knowledge of:

- OH&S regulations/requirements, equipment, material and personal safety requirements
- environmental protection requirements/substance disposal and storage requirements
- material safety data sheets
- types of air dry and polyurethane enamel refinishing materials
- application methods
- paint surface fault identification and rectification procedures
- drying methods for air dry and polyurethane enamel refinishing material
- types of spray guns
- spray gun operation and spraying techniques
- spray gun cleaning methods
- work organisation and planning processes
- enterprise quality processes

## Evidence Guide

### EVIDENCE GUIDE

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.

#### Overview of assessment

##### Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that competence is fully observed and there is ability to transfer competence to changing circumstances and to respond to unusual situations in the critical aspects of:

- observing safety procedures and requirements
- communicating effectively with others involved in or affected by the work
- selecting methods and techniques appropriate to the circumstances
- completing preparatory activity in a systematic manner
- preparing air dry and polyurethane enamel paint
- applying a range of air dry and polyurethane enamel refinishing materials
- identifying paint faults and determining rectification faults
- rectifying faults
- applying environmental procedures.

##### Context of, and specific resources for assessment

Application of competence is to be assessed in the workplace or simulated worksite. Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints. Assessment is to comply with regulatory requirements, including Australian Standards. The following resources should be made available:

- workplace location or simulated workplace
- materials relevant to application of air dry and polyurethane enamel refinishing materials
- equipment, hand and power tooling appropriate to application of air dry and polyurethane enamel refinishing materials
- activities covering mandatory task requirements
- specifications and work instructions.

##### Method of assessment

- Assessment must satisfy the endorsed assessment guidelines of the automotive industry's RS&R Training Package.
- Assessment methods must confirm consistency and accuracy of performance together with application of

**EVIDENCE GUIDE**

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>underpinning knowledge.</p> <ul style="list-style-type: none"><li>• Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies.</li><li>• Assessment may be applied under project related conditions and require evidence of process.</li><li>• Assessment must confirm a reasonable inference that competence is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.</li><li>• It is preferable that assessment reflects a process rather than an event and occurs over a period of time to cover varying quality circumstances. Evidence of performance may be provided by customers, team leaders/members or other persons subject to agreed authentication arrangements.</li><li>• Competence in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role.</li></ul> |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**EVIDENCE GUIDE****Guidance information for 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. Bold 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.

**Paint types**

Paint types are to include air dry synthetic enamels, enamel additives, two-pack polyurethane acrylic enamels, urethane additives and paint reducers.

**Methods**

Methods are to include:

- spray gun selection, various spraying techniques, drying procedures, paint mixing
- polishing and detailing of surfaces.

**OH&S**

OH&S requirements are to be in accordance with legislation/regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances.

**Personal protective equipment**

Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices.

**Safe operating procedures**

Safe operating procedures are to include, but are not limited to operational risk assessment and treatments associated with vehicular movement, toxic substances, electrical safety, machinery movement and operation, manual and mechanical

| <b>RANGE STATEMENT</b>                  |                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | lifting and shifting, working in proximity to others and worksite visitors.                                                                                                                                                                                                                                                             |
| <b>Emergency procedures</b>             | Emergency procedures related to this unit are to include, but are not limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and worksite evacuation.                                                                                                                          |
| <b>Environmental requirements</b>       | Environmental requirements are to include but are not limited to waste management, noise, dust and clean-up management.                                                                                                                                                                                                                 |
| <b>Quality requirements</b>             | Quality requirements are to include, but are not limited to regulations, including Australian Standards, internal company quality policy and standards and enterprise operations and procedures.                                                                                                                                        |
| <b>Statutory/regulatory authorities</b> | Statutory/regulatory authorities may include Federal, State/Territory and local authorities administering acts, regulations and codes of practice.                                                                                                                                                                                      |
| <b>Tooling and equipment</b>            | Tooling and equipment may include various spray guns, air pressure regulators, air compressors, spray booths, baking ovens, heating and lighting systems, strainers, masking equipment and safety equipment.                                                                                                                            |
| <b>Materials</b>                        | Materials may include rags, tac rags, cleaning solvents and cleaning materials.                                                                                                                                                                                                                                                         |
| <b>Communications</b>                   | Communications are to include, but are not limited to verbal and visual instructions and fault reporting and may include worksite specific instructions, written instructions, plans or instructions related to job/task, telephones and pagers.                                                                                        |
| <b>Information/documents</b>            | <p>Sources of information/documents may include:</p> <ul style="list-style-type: none"> <li>• verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets, diagrams or sketches</li> <li>• safe work procedures related to application of</li> </ul> |

| <b>RANGE STATEMENT</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | air dry and polyurethane enamel refinishing materials <ul style="list-style-type: none"> <li>• regulatory/legislative requirements pertaining to automotive painting and finishing</li> <li>• engineer's design specifications and instructions</li> <li>• organisation work specifications and requirements</li> <li>• instructions issued by authorised enterprise or external persons</li> <li>• Australian Standards.</li> </ul> |

## Unit Sector(s)

|                    |              |
|--------------------|--------------|
| <b>Unit sector</b> | Vehicle body |
|--------------------|--------------|

## Co-requisite units

|                           |  |  |
|---------------------------|--|--|
| <b>Co-requisite units</b> |  |  |
|                           |  |  |
|                           |  |  |

## Competency field

|                         |  |
|-------------------------|--|
| <b>Competency field</b> |  |
|-------------------------|--|