Modification history

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| Release | Comments |
| Release 2 | This version released with FWP Forest and Wood Products Training Package Version 4.0.  Version created to update industry terminology, workplace health and safety requirements and foundation skills and to clarify intent of unit in application and assessment requirements. |
| Release 1 | This version replaces equivalent unit FPIWPP3209B Prepare resin and additives, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2.  This is the first release of this unit in the new standards format. |

| UNIT CODE | FWPWPP3209 Prepare resin and additives |
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| Application | This unit of competency describes the skills and knowledge required to mix glue, resin and additives for use in the production of engineered wood products.  The unit applies individuals who work as production operators and technicians in an engineered wood products facility. Operators generally work under broad or limited direction to complete routine activities related to own work and take responsibility for their work.  All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.  No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Wood Panel Products |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for mixing resin and additives | 1.1 Review work order, workplace health and safety requirements, environmental protection practices and emergency procedures for mixing resin and additives and where required check with appropriate personnel  1.2 Identify and report hazards and use personal protective equipment (PPE) in line with workplace requirements and health and safety legislation to maintain safe work practices  1.3 Obtain type and quantity of glue or resin to be mixed from storage location  1.4 Select mixing process and plan in line with work order |
| 2. Mix glue | 2.1 Use equipment in line with workplace health and safety procedures, manufacturer instructions and environmental protection practices  2.2 Measure and mix glue or resin ingredients and additives to ensure minimum wastage  2.3 Transfer mix to appropriate storage location or production equipment through transfer lines without contaminating  2.4 Monitor rate that glue or resins and additives are being added and where required adjust pumps  2.5 Test mix samples regularly in line with manufacturer instructions |
| 3. Maintain and clean equipment | 3.1 Clean mixing, storage and transfer equipment in line with workplace health and safety procedures  3.2 Turn off pumps and flush equipment in line with workplace health and safety procedures and manufacturer recommendations  3.4 Dispose of excess glue or resin and additives in line environmental protection practices and store equipment  3.4 Record and report production outcomes and equipment faults to appropriate personnel |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Numeracy | * calculate quantity of glue or resin to meet work order production requirements * calculate routine mixing ratios for glue or resin and additives * interpret numerical data from test samples |
| Reading | * interpret safety data sheets for glue, resins and additives |
| Navigate the world of work | * understand main tasks, responsibilities and boundaries of own role |
| Interact with others | * use modes of communication suitable to purpose to confirm and clarify understanding |
| Get the work done | * recognise and respond to routine problems by reporting or rectifying |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPWPP3209 Prepare resin and additives | FWPWPP3209 Prepare resin and additives | Updated industry terminology, workplace health and safety requirements and foundation skills; clarified intent of the unit and assessment requirements; changed unit title and code for compliance and consistency with the updates | Equivalent unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47> |

| TITLE | Assessment requirements for FWPWPP3209 Prepare resin and additives |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements, performance criteria and foundation skills of this unit. There must be evidence that, on at least one occasion, the individual has:   * followed workplace health and safety requirements and environmental protection procedures for mixing resins and additives used in the production of engineered wood products * prepared glues and resins in line with individual work orders for each mix, prescribing different quantities for each job; types of glues and resins include: * synthetic or animal based adhesives * rubber based adhesives * poly vinyl acetate * epoxy resins * formaldehydes * for the above jobs, taken samples and tested mix for: * mix quantities * setting speed * how weather conditions may be affecting the process. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * health and safety hazards or risks related to mixing resins and additives for the production of engineer wood products as identified through risk assessments, manufacturer technical information, regulations and industry health and safety guides * workplace procedures specific to mixing glue, resin and additives: * health and safety with particular emphasis on equipment lock out, emergency procedures, use of personal protective equipment and handling hazardous substances * use of equipment for mixing resins and additives * communication reporting lines * recording and reporting production outcomes and equipment faults * environmental protection practices for preparing resins and additives: * reducing water and energy use * cleaning plant, tools and equipment * disposing of hazardous substances * storage layout and categories for: * raw materials * finished mixes * typical flow of material supply in and out of the mixing area * typical work flow processes for mixing glue, resins and additives * properties, at a basic level of understanding, of glue and resin types and their uses: * synthetic or animal based adhesives * rubber based adhesives * poly vinyl acetate * epoxy resins * formaldehydes * properties, at a basic level of understanding, of additive types and their uses * effects of weather conditions on bonding times * methods used to: * mix glues, resins and additives * test samples of mix * safely store glues, resins and additives * purpose, features, operation and basic non-specialist maintenance of mixing systems used to mix glue, resin and additives: * mixers with manually controlled feed * mixers with pre-programmed mix quantities. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in an environment that accurately represents workplace conditions * resources, equipment and materials: * mixing system with transfer pumps * personal protective equipment suitable for mixing glue, resin and additives * glue, resin and additives * specifications: * recipes for mixing glues, resin and additives * manufacturer safety data sheets for glues, resins and additives, instructions for equipment use, recommendations for maintaining equipment * work order with specific instructions for mixing glue, resins and additives * template documents for recording production outcomes and equipment faults * workplace procedures for mixing glue, resin and additives including health and safety and emergency procedures and environmental protection procedures * relationships: * relevant personnel for the purposes of communicating information.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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