



Australian Government

ICPINK335 Manufacture varnish and resin

Release: 1

ICPINK335 Manufacture varnish and resin

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manufacture varnishes and resins.

It applies to individuals who generally work under limited supervision to identify process and job requirements, set up machinery or equipment and complete the manufacturing process according to defined procedures. They also have some accountability for monitoring output and preventing or addressing production problems.

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

Unit Sector

Ink manufacture

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Read and interpret job requirements from documentation	1.1 Appropriate processes are identified and confirmed 1.2 Appropriate materials and/or equipment are selected according to job specifications
2 Startup machines or equipment	2.1 Pre-startup checks are completed and documented according to enterprise procedures 2.2 Utilities are checked 2.3 Raw materials or feed lines are checked to ensure availability 2.4 Pre-startup conditions are reported according to enterprise procedures 2.5 Startup is conducted according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	2.6 Machine or equipment operation is verified according to enterprise procedures
3 Maintain varnish/resin production process	3.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.2 Production is maintained according to work health and safety (WHS) requirements and enterprise procedures 3.3 Process and equipment are monitored during batch manufacture to ensure operation is maintained 3.4 Records, log or checklists are completed according to enterprise procedures 3.5 Machines or equipment are inspected and readouts recorded and interpreted 3.6 Quality inspections and sampling are undertaken according to enterprise procedures 3.7 Consumables are monitored and added to the process according to job specifications
4 Maintain operation of equipment/process conditions	4.1 Variations or irregularities of equipment operation or process conditions are identified and reported 4.2 Production difficulties are anticipated and action is taken to prevent occurrence by timely intervention according to enterprise procedures 4.3 Corrective action is documented and reported according to enterprise procedures
5 Shut down varnish or resin manufacture process	5.1 Pre-shutdown checks are carried out and documented according to enterprise procedures 5.2 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.3 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.4 Product or materials used in manufacture are removed from operating area where appropriate 5.5 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
6 Clean up	6.1 Equipment cleaning requirements are identified 6.2 Correct equipment or materials for manual or mechanical

ELEMENT	PERFORMANCE CRITERIA
	cleaning are selected 6.3 Cleaning is undertaken according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.5, 2.6, 3.1, 3.2, 3.4-3.7, 4.3, 5.1-5.3, 5.5, 6.3	Identifies and interprets information from job and manufacturer's specifications and enterprise procedures
Writing	2.1, 2.4, 3.4, 3.5, 4.1, 4.3, 5.1	Documents actions and outcomes in accordance with enterprise procedures
Oral communication	1.1, 2.4, 3.1, 4.1, 4.3, 5.3	Provides information regarding issues encountered and actions undertaken
Navigate the world of work	2.1, 2.4-2.6, 3.1, 3.2, 3.6, 4.2, 4.3, 5.1-5.5, 6.3	Complies with legislative requirements and organisational policies and procedures relevant to own role
Interact with others	3.1, 5.3	Cooperates with others as part of familiar routine activities and contributes to specific activities requiring joint responsibility
Get the work done	1.1, 1.2, 2.2, 2.3, 3.1, 3.3, 3.7, 4.1, 4.2, 5.1, 6.1, 6.2	- Follows clearly defined instructions and monitors own progress on tasks - Implements standard procedures when required to make routine decisions relevant to immediate tasks - Initiates standard procedures when responding to anticipated or actual problems directly related to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

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ICPINK335 Manufacture varnish and resin	ICPIM335C Manufacture varnish and resin	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPINK335 Manufacture varnish and resin

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Performance Evidence

Evidence of the ability to:

- find, interpret and use information from various sources to carry out tasks according to requirements
- manufacture TWO batches of varnish or resin to specifications, using EITHER fusion cooking OR reaction, including in-process testing according to manufacturer's and job specifications, health and safety requirements and enterprise procedures including:
 - selecting and checking materials and equipment prior to processing
 - carrying out quality checks during processing and making required adjustments to process or equipment
 - completing required records
 - shutting down equipment
 - cleaning of equipment and removal of product and waste
- complete a planned shutdown.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the name and location of the enterprise document that contains information about:
 - batch coding system used in the work area
 - system for labelling containers
 - system for disposal of waste
- identify health and safety requirements and environmental issues in relation to:
 - production of varnish or resin
 - manual handling issues that arise in the manufacture of varnish or resin
 - safety equipment that is required and how to check when fitting and using

- chemicals used in the clean-up stage of the process
- specify the checks, tests and/or monitoring required during all stages of the process including:
 - when measuring materials
 - when preparing for filtration
 - pre-startup checks that are required for TWO processes in varnish or resin manufacture
 - procedures for adding liquids or solids to a varnish or resin mix
 - quality checks that are required during the filtration process
- explain the technical aspects of the varnish or resin manufacture process including:
 - equipment that is required for the manufacture of varnish or resin
 - properties that ink gains from the two basic components of varnish, resins and solvents
 - characteristics and end use of gelled and non-gelled varnishes
 - ideal conditions for filtration of varnish or resin product
 - effect that water contamination has on the manufacture of varnish or resin and what steps should be taken to avoid it
 - methods that are available for testing viscosity of varnish or resin
 - manner in which the viscosity of a batch of varnish or resin is increased
 - actions required if the viscosity is too low
 - procedures for recording details about the formulations, and in-process testing where required
- outline inspections and monitoring that is carried out during varnish or resin production.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the ink manufacture field of work and include access to:

- enterprise documents and procedures
- raw materials and consumables
- machines and equipment
- cleaning chemicals.

Assessors must satisfy NVR/AQTF assessor requirements.

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