



# Chemical, Pharmaceutical and Petro-Chemical Operations

## Qualification Structure

The Chemical, Pharmaceutical and Petro-Chemical Operations Qualifications are available at Levels 1 to 4. At Levels 2 & 3 the Qualification Structure requires candidates to complete Common Mandatory units followed by a choice of pathways. At all levels candidates are required to complete Mandatory Units and then have a choice of Optional Units.

Document detail:

Chemical, Pharmaceutical and Petro-Chemical Operations	Level 1		NVQ & SVQ
Chemical, Pharmaceutical and Petro-Chemical Operations	Level 2	Process Operations Process Support Services Control Operations Process	NVQ & SVQ NVQ & SVQ NVQ & SVQ
Chemical, Pharmaceutical and Petro-Chemical Operations	Level 3	Controlling Process Operations Technical Support	NVQ & SVQ NVQ & SVQ
Chemical, Pharmaceutical and Petro-Chemical Operations	Level 4	Technical Support	NVQ & SVQ

Who is the Qualification for:

The above qualifications may be suitable for you if you have one of the following job roles:

- Chemical Plant Process Worker
- Chemical Engineer
- Chemical Engineering Technician

Chemical, Pharmaceutical and Petro-Chemical Operations	Level 1 100/3453/5 (NVQ)	Level 1 G7AH21 (SVQ)
Last Registration Date	31 <sup>st</sup> December 2010	31 <sup>st</sup> March 2010
Last Certification Date	31 <sup>st</sup> December 2011	31 <sup>st</sup> March 2012

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Total Number of Units Required: 6

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#### Mandatory Units

- 1.11 Responding to incidents, hazardous conditions and emergencies
  - 1.12 Handover
  - 1.13 Working effectively in a team
  - 1.14 Work safely
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#### Optional Units

*2 units required where 1 of these must be job specific from Option A plus 1 further unit from Option B:*

##### Option A

- 1.1 Receive goods and materials into storage
- 1.3 Prepare process materials according to instructions
- 1.5 Produce by processing operation

##### Option B

- 1.2 Maintain the quality of goods in storage
- 1.4 Moving raw materials, intermediate and finished products to facilitate production
- 1.6 Routine maintenance of plant and equipment
- 1.7 Clean and prepare items of equipment for production and/or maintenance
- 1.8 Work in aseptic or clean room conditions
- 1.9 Filling and packing materials and products
- 1.10 Packing the product by hand

Chemical, Pharmaceutical and Petro-Chemical Operations	Level 2 100/3454/7 (NVQ) All Pathways	Level 2 G7AJ22 (SVQ) Control Operations Process	Level 2 G7AK22 (SVQ) Process Operations	Level 2 G7AL22 (SVQ) Process Support Services
Last Registration Date	31 <sup>st</sup> December 2010	31 <sup>st</sup> March 2010	31 <sup>st</sup> March 2010	31 <sup>st</sup> March 2010
Last Certification Date	31 <sup>st</sup> December 2012	31 <sup>st</sup> March 2012	31 <sup>st</sup> March 2012	31 <sup>st</sup> March 2012

Total Number of Units Required: 9

### Mandatory Units

- 1.11 Responding to incidents, hazardous conditions and emergencies
- 1.12 Handover
- 1.13 Working effectively in a team
- 2.15 Identify and deal with hazards in the work environment

### Optional Units

*5 units required where 3 of these must be job specific from Option A plus 2 further units from Option B:  
If a candidate has already chosen unit 2.13 in Option A, this unit may NOT be selected again from Option B*

#### Option A

##### *Process Operations*

- 2.5 Prepare for processing within Chemical, Pharmaceutical and Petro-Chemical Operations
- 2.6 Control, monitor and adjust the processing operation
- 2.7 Complete processing operation
- 2.13 Contribute to the improvement of routine working practices

##### *Process Support Services*

- 1.3 Prepare process materials according to instructions
- 2.1 Transfer materials into and between stages of production
- 2.10 Clean and prepare complex items of plant and equipment for production
- 2.13 Contribute to the improvement of routine working practices

##### *Control Operations Process*

- 2.2 Prepare integrated process systems for remote control operation
- 2.3 Remotely control integrated process systems
- 2.4 Prepare integrated process systems for remote shutdown
- 2.13 Contribute to the improvement of routine working practices

#### Option B

##### *Process Operations*

- 2.1 Transfer materials into and between stages of production
- 2.8 Sample and test materials
- 2.9 Separate and dispose of processing materials, by-products and wastes
- 2.10 Clean and prepare complex items of plant and equipment for production
- 2.11 Starting the packaging operations
- 2.12 Ending the packaging operations
- 2.13 Contribute to the improvement of routine working practices
- 2.14 Ensure your own actions aim to protect the environment
- 2.16 Maintain the condition of engineering assets
- 1.8 Work in aseptic or clean room conditions
- 3.15 Enable learning through demonstrations and instruction

##### *Process Support Services*

- 2.8 Sample and test materials
- 2.9 Separate and dispose of processing materials, by-products and wastes
- 2.11 Starting the packaging operations
- 2.12 Ending the packaging operations
- 2.13 Contribute to the improvement of routine working practices
- 2.14 Ensure your own actions aim to protect the environment
- 2.16 Maintain the condition of engineering assets
- 1.8 Work in aseptic or clean room conditions
- 3.15 Enable learning through demonstrations and instruction

##### *Control Operations Process*

- 2.8 Sample and test materials
- 2.9 Separate and dispose of processing materials, by-products and wastes
- 2.10 Clean and prepare complex items of plant and equipment for production
- 2.11 Starting the packaging operations
- 2.12 Ending the packaging operations
- 2.13 Contribute to the improvement of routine working practices
- 2.14 Ensure your own actions aim to protect the environment
- 2.16 Maintain the condition of engineering assets
- 1.8 Work in aseptic or clean room conditions
- 3.15 Enable learning through demonstrations and instruction

Chemical, Pharmaceutical and Petro-Chemical Operations	Level 3 100/3455/9 (NVQ) All Pathways	Level 3 G7AP23 (SVQ) Controlling Process Operations	Level 3 G7AM23 (SVQ) Technical Support
Last Registration Date	31 <sup>st</sup> December 2010	31 <sup>st</sup> March 2010	31 <sup>st</sup> March 2010
Last Certification Date	31 <sup>st</sup> December 2013	31 <sup>st</sup> March 2013	31 <sup>st</sup> March 2013

Total Number of Units Required: 10

### Mandatory Units

- 1.12 Handover
- 1.13 Working effectively in a team
- 3.10 Emergency procedure

### Optional Units

*7 units required where 3 of these must be job specific from Option A plus 4 further units from Option B:*

#### Option A

##### *Controlling Process Operations*

- 3.1 Control room operations
- 3.3 Prepare for complex processing operation
- 3.4 Control, maintain and restore complex processing operation
- 3.5 Complete complex processing operation
- 3.6 Contribute to the maintenance of product quality

##### *Technical Support*

- 2.10 Clean and prepare complex items of plant and equipment for production
- 3.7 Plan to maintain product integrity
- 3.8 Contribute to standard operating procedures
- 3.11 Solving process problems

#### Option B

##### *Controlling Process Operations*

If unit 3.6 is chosen as an Optional Unit in Option A it may NOT be selected again in Option B

- 2.10 Clean and prepare complex items of plant and equipment for production
- 2.14 Ensure your own actions aim to protect the environment
- 3.2 Control emergencies and critical situations in chemical, pharmaceutical and petro-chemical manufacture
- 3.6 Contribute to the maintenance of product quality
- 3.7 Plan to maintain product integrity
- 3.9 Allocate personnel to maintain processing
- 3.11 Solving process problems
- 3.12 Enable individual learning through coaching
- 3.13 Conduct an assessment of risks in the workplace
- 3.14 Identify improvements to energy efficiency
- 3.15 Enable learning through demonstrations and instruction

##### *Technical Support*

If units 2.10 or 3.7 are chosen as Optional Units in Option A they may NOT be selected again in Option B

- 2.10 Clean and prepare complex items of plant and equipment for production
- 2.14 Ensure your own actions aim to protect the environment
- 3.2 Control emergencies and critical situations in chemical, pharmaceutical and petro-chemical manufacture
- 3.6 Contribute to the maintenance of product quality
- 3.7 Plan to maintain product integrity
- 3.9 Allocate personnel to maintain processing
- 3.12 Enable individual learning through coaching
- 3.13 Conduct an assessment of risks in the workplace
- 3.14 Identify improvements to energy efficiency
- 3.15 Enable learning through demonstrations and instruction

Chemical, Pharmaceutical and Petro-Chemical Operations	Level 4 100/3456/0 (NVQ) Technical Support	Level 4 G7AN24 (SVQ) Technical Support
Last Registration Date	31 <sup>st</sup> December 2010	31 <sup>st</sup> March 2010
Last Certification Date	31 <sup>st</sup> December 2013	31 <sup>st</sup> March 2014

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Total Number of Units Required: 11

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#### Mandatory Units

- 1.12 Handover
- 1.13 Working effectively in a team
- 3.10 Emergency procedure

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#### Optional Units

*8 units required where 3 of these must be job specific from Option A plus 5 further units from Option B:*

##### Option A

- 4.1 Develop and monitor plans and procedures
- 4.4 Solve operational problems
- 4.5 Provide technical guidance and support to others

##### Option B

- 2.14 Ensure your own actions aim to protect the environment
- 3.2 Control emergencies and critical situations in chemical, pharmaceutical and petro-chemical manufacture
- 3.9 Allocate personnel to maintain processing
- 3.13 Conduct an assessment of risks in the workplace
- 3.15 Enable learning through demonstrations and instruction
- 4.2 Contribute to the commissioning and optimisation of new or modified plant, equipment and processes
- 4.3 Respond to process problems
- 4.6 Develop and update standard operating procedure/s
- 4.7 Identify the scope for improvement in the way the organization manages energy
- 4.8 Provide advice on the development and implementation of energy policies
- 4.9 Monitor and evaluate energy efficiency
- 4.10 Manage continuous quality improvement
- 4.11 Implement quality assurance systems
- 4.12 Provide advice and support for the development and implementation of quality systems