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SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Food Manufacturing

Registered by NSB 06, Manufacturing, Engineering and Technology, publishes the following qualification and unit standards for public comment.

This notice contains the titles, fields, subfields, NQF levels, credits, and purpose of the qualifications unit standards. The qualification and unit standards can be accessed via the SAQA web-site at www.saga.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield Forum West, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the unit standards should reach **SAQA** at the address *below and no later than 11 April 2005*. All correspondence should be marked **Standards Setting – SGB for Food Manufacturing** and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

National Diploma: Clear Fermented Beverage Processing: Brewing

SAQA QUAL ID	QUALIFICATION TITLE		
49532	National Diploma: Clear Fermented Beverage Processing: Brewing		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
QUAL TYPE	FIELD	SUBFIELD	
National Certificate	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUALIFICATION CLASS
Undefined	240	Level 6	Regular-Unit Stds Based

PURPOSE AND RATIONALE OF THE QUALIFICATION

A person acquiring this qualification will be able to manage and produce a safe quality assured, clear fermented beverage product within a brewery environment by controlling, analysing and optimising processing conditions, human resources and associated financial costs in order to achieve a product that meets market specifications.

This qualification will contribute to the full development of the learner within the food and beverages processing environment by providing recognition, further mobility and transportability within the field of manufacturing and assembly. The skills, knowledge and understanding demonstrated within this qualification are essential for social and economic transformation and contribute to the upliftment and economic growth within the food and beverage manufacturing and processing environment.

The typical learner identified to benefit from the qualification will be a person with the technical and operational responsibility of producing a fermented beverage within a brewery environment. This qualification has been developed in partnership with the Institute and Guild of Brewing. The syllabus of the Associate Membership Examination (AME) is reflected within the core unit standards of the qualification. This qualification will fill a priority identified by the Food and Beverage SETA sector skills plan. This qualification will provide a continuation from basic beverage brewing qualifications and forms the basis of further learning in the management of the manufacture of beer. This qualification will improve the effectiveness and productivity of the beverage manufacturing process in South Africa and thus provide an impetus for improved global competitiveness.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED TO BE IN PLACE

The credits and related unit standards require that the learner has knowledge and experience in clear beverage fermentation processes at a minimum level of the General Certificate in Brewing and Packaging from the Institute and Guild of Brewing. Some supplementary learning may be required in the fields of Chemistry, Microbiology and Engineering principles up to NQF 5.

Recognition of prior learning

This qualification may be achieved in part or completely through the recognition of prior learning, which includes formal, informal and non-formal learning and work experience.

QUALIFICATION RULES

Level, credits and learning components assigned to the qualification

The rules of combination for a Level 6 qualification advocate flexibility in terms of credits assigned at fundamental core and elective levels.

The level assigned to this qualification is appropriate because a range of well-developed knowledge and skills is required within a significant choice of procedures.

The accountability for production includes decision-making, problem solving, people management and some basic research in order to optimise the technical processes within tightly controlled costs.

The qualification consists of fundamental, core and elective components.

In the fundamental component of the qualification, a learner must be able to demonstrate management competencies in the immediate and broader contexts.

The fundamental and core components of the qualification reflect the mandatory minimum clear fermented beverage skills and knowledge needed in order to be transportable in the food or beverage manufacturing environment.

To supplement the management competencies of a typical learner, at least 16 credits must be achieved from the elective component of the qualification. Attainment of all the above mentioned unit standards comprises the minimum qualification credit requirement. Minimum 240

The additional elective unit standards are optional thereby enabling the learner to compound additional credits relevant to the particular learning context.

EXIT LEVEL OUTCOMES

1. Integrate knowledge of Fermented Beverage Processing (Brewing science and technology) in order to manage the various processes of fermented beverage production to produce a specific product: This includes

- > Measuring and analysing process data
- > Identifying non conformance
- > Problem Solving
- > Implementing Corrective Action

2. Optimise processing conditions in order to successfully brew, ferment and clarify a quality fermented beverage product that meets market specifications. This includes

- > Integration of appropriate hygienic requirements at each processing stage
- > Optimisation of energy usage
- > Minimisation of process losses
- > Prevention of re-work
- > Integration and management of quality systems

3. Control and Manage process outputs with cognisance to safety health and environmental issues.

This includes:

- > Managing and Controlling Effluent
- > Applying relevant environmental and occupational health and safety legislation

4. Manage and Control Raw Materials

- > Selecting raw materials for use in the manufacture of beer
- > Managing the processing of raw materials

5. Manage Human Resources

- > Applying relevant personnel procedures
- > Applying relevant labour legislation
- > Setting performance goals and measures
- > Formulating individual and team development plans
- > Evaluating performance

6. Apply sound financial management practices and techniques including:

- > Understanding the principles of budgeting and working within the limits of a budget
- > Interpreting financial statements
- > Compiling financial reports
- > Interpreting and analysing business data

ASSOCIATED ASSESSMENT CRITERIA

1.

- > Manage and control the brew house process according to standard operating procedure
- > Measure, analyse and interpret brew house process and quality data according to standard operating procedure
- > Identify non conformance to brew house process and product
- > Manage and implement corrective actions to the brew house process

2

- > Manage and control the fermentation process according to standard operating procedure
- > Measure, analyse and interpret fermentation process and quality data according to standard operating procedure
- > Identify non conformance to fermentation process and product
- > Manage and implement corrective actions to the fermentation process

3

- > Manage and control the filtration process according to standard operating procedure
- > Measure, analyse and interpret filtration process and quality data according to standard operating procedure
- > Identify non conformance to filtration process and product
- > Manage and implement corrective actions to the filtration process

4

- > Raw materials are managed and controlled according to standard operating procedure
- > Fermented beverage processing equipment cleaning and sanitation is managed and controlled according to standard operating procedure.
- > Apply knowledge of occupational, health and environmental legislation relevant to fermentation beverage processing according to standard operating procedure.
- > Apply knowledge of fermented beverage processing science to manufacturing process.
- > Apply knowledge of the packaging process and trade in the fermented beverage processing according to standard operating procedure

5.

- > Manage and control human resource practices according to world-class manufacturing principles
- > Identify and apply relevant personnel procedures according to company standards
- > Identify and apply relevant requirements according to current labour legislation.
- > Implement change management practices according to recognised best practices
- > Performance goals are set which are measurable, achievable and aligned to individual career paths and company objectives.
- > Performance is evaluated using evidence which is valid, current and sufficient

6.

- > Manage and control financial resources according to world class manufacturing principles
- > Set budgets according to the required company standards
- > Control budgets according to company standards
- > Key financial items on a financial statement are interpreted according to financial principles
- > Business reports are prepared which are accurate and concise

Integrated assessment

The applied competence (practical, foundational and reflexive competencies) of this qualification implies the learner will be able to produce a safe, quality assured fermented product by managing and, controlling the production plant

The identifying and solving of problems, team work, organising one-self, the using of applied science, the implication of actions and reactions in the world as a set of related systems must be assessed during any combination of practical, foundational and reflexive competencies assessment methods and tools to determine the whole person development and integration of applied knowledge and skills.

The Associate Membership Examination of the Institute and Guild of Brewing will form part of the assessment of the theory of brewing science and technology for this qualification.

Applicable assessment tool(s) must be used to establish the foundational, reflexive and embedded knowledge to problem solving and application of the world as a set of related systems within the processing

environment.

A detailed portfolio of evidence is required to proof the practical, applied and foundational competencies of the learner.

Assessors and moderators should develop and conduct their own integrated assessment by making use of a range of formative and summative assessment methods.

Whilst individual Unit Standards and Skills Programmes should be formatively and summatively assessed, a holistic summative assessment against the exit level outcomes of the entire qualification must be conducted as a discrete event. Assessors should recognise prior learning by assessing and granting credit for evidence that learning that has already been acquired through formal, informal and non-formal learning and work experience.

INTERNATIONAL COMPARABILITY

The Associate Membership Examination of the Institute and Guild of Brewing, upon which this qualification is based, is recognised internationally in the English-speaking Brewing World by manufacturers of fermented beverage products (beer), equipment manufactures and suppliers, suppliers of materials, academic institutions and research organisations.

ARTICULATION OPTIONS

The qualification will enable the qualifying learner to progress to learning for additional qualifications in fermented beverage specific contexts, or develop the qualification further to include learning and research at NQF 7.

The fundamental and elective unit standards are generic to management type qualifications within the manufacturing industry and therefore credit may be transferred to a differently scoped technological fermented beverage qualification at the same NQF Level.

MODERATION OPTIONS

- > Anyone assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor with the relevant ETQA.
- > Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider; with the relevant ETQA.
- > Assessment and moderation of assessment will be overseen by the relevant ETQA according to the ETQA's policies and guidelines for assessment and moderation; in terms of agreements reached around assessment and moderation between ETQA's (including professional bodies); and in terms of the moderation guideline detailed immediately below.
- > Moderation must include both internal and external moderation of assessments at exit points of the qualification, unless ETQA policies specify otherwise. Moderation should also encompass achievement of the competence described both in individual unit standards, exit level outcomes as well as the integrated competence described in the qualification.

Anyone wishing to be assessed against this Qualification may apply to be assessed by any assessment agency, assessor or provider institution that is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

For an applicant to register as an assessor, the applicant needs:

- > Well developed interpersonal skills, subject matter and assessment experience.
- > The assessor needs to be competent in the Planning and Conducting Assessment of Learning Outcomes as described in the unit standards Plan and Conduct Assessment of Learning Outcomes NQF level 5. The subject matter expertise must be well developed within the field of Fermented Beverage Processing (Brewing).
- > A qualification similar to the National Diploma in Fermented Beverage Processing (Brewing) with a minimum of 6-12 months relevant field expertise after he/she has completed the qualification.
- > The subject matter expertise of the assessor can be established by recognition of prior learning.
- > Assessors need to be registered with the relevant Education and Training Quality Assurance Body.
- > Detailed documentary proof of educational qualification, practical training undergone, and experience

gained by the applicant must be provided (Portfolio of Evidence).

NOTES

This qualification will replace 22052, " Diploma Brewing" Level 5, Credits 240, as soon as it is registered.

UNIT STANDARDS

(Note: A blank space after this line means that the qualification is not based on Unit Standards,)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	119275 Manage and Control Raw Materials	Level 6	25	Draft - Prep for P Comment
core	119276 Achieve consumer quality beer properties	Level 6	25	Draft - Prep for P Comment
core	119277 Manage yeast supply	Level 6	10	Draft - Prep for P Comment
Core	119278 Optimise process technology	Level 6	15	Draft - Prep for P Comment
core	119279 Control clear beer fermentation systems	Level 6	30	Draft - Prep for P Comment
core	119281 Demonstrate knowledge of brewing microbiology	Level 6	30	Draft - Prep for P Comment
core	119282 Manufacture wort	Level 6	22	Draft - Prep for P Comment
Core	119283 Manage beer clarity	Level 6	10	Draft - Prep for P Comment
Core	119284 Optimise the cleaning and sanitising of a beer manufacturing environment	Level 6	10	Draft - Prep for P Comment
Core	119285 Manage effluent, waste and environmental factors	Level 6	9	Draft - Prep for P Comment
Core	119287 Mature and store green beer	Level 6	10	Draft - Prep for P Comment
Elective	13952 Demonstrate basic understanding of the Primary labour legislation that impacts on a business unit	Level 4	8	Registered
Elective	10148 Supervise a project team of a business project to deliver project objectives	Level 5	14	Reregistered
Elective	13068 Apply the concept of management accounting techniques in an advanced manufacturing environment	Level 6	8	Registered
Elective	119280 Manage plant design and maintenance for a food or sensitive consumer manufacturing environment	Level 6	8	Draft - Prep for P Comment
Fundamental	11473 Manage individual and team performance	Level 4	8	Registered
Fundamental	10631 Demonstrate an understanding of manufacturing, principles, methodologies and processes	Level 5	7	Reregistered
Fundamental	115407 Apply the principles of change management in the workplace	Level 5	10	Registered
Fundamental	10606 Apply financial and business principles in a manufacturing environment	Level 6	8	Reregistered
Fundamental	10608 Manage a quality assurance system in a sensitive consumer product manufacturing environment	Level 6	9	Reregistered
Fundamental	119288 Demonstrate knowledge of the packaging process and the trade	Level 6	12	Draft - Prep for P Comment



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

1

Optimise quality during food or sensitive consumer product handling

SAQA US ID	UNIT STANDARD TITLE		
119286	Optimise quality during food or sensitive consumer product handling		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	9	Level 5	Regular

SPECIFIC OUTCOME 1

.Demonstrate an understanding of the relevant quality management system.

SPECIFIC OUTCOME 2

Monitor the quality during food or sensitive consumer product handling.

SPECIFIC OUTCOME 3

Control the quality during food or sensitive consumer product handling.

SPECIFIC OUTCOME 4

Implement quality improvements for food or sensitive consumer product handling.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

2

Achieve consumer quality beer properties

SAQA US ID	UNIT STANDARD TITLE		
119276	Achieve consumer quality beer properties		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	25	Level 6	Regular

SPECIFIC OUTCOME 1

Manage and control the brewing process.

SPECIFIC OUTCOME 2

Measure, analyse and interpret process and quality data.

SPECIFIC OUTCOME 3

Identify and describe non conformance.

SPECIFIC OUTCOME 4

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

3

Control clear beer fermentation systems

SAQA US ID	UNIT STANDARD TITLE		
119279	Control clear beer fermentation systems		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	30	Level 6	Regular

SPECIFIC OUTCOME 1

Manage and control the fermentation process.

SPECIFIC OUTCOME 2

Measure analyse and interpret process data.

SPECIFIC OUTCOME 3

Identify non conformance.

SPECIFIC OUTCOME 4

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

4

Demonstrate knowledge of brewing microbiology

SAQA US ID	UNIT STANDARD TITLE		
119281	Demonstrate knowledge of brewing microbiology		
SGB NAME	NSB_06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	30	Level 6	Regular

SPECIFIC OUTCOME 1

Select yeast suitable for the manufacture of beer.

SPECIFIC OUTCOME 2

Store and maintain yeast cultures.

SPECIFIC OUTCOME 3

Determine the degree of microbial contamination present during the manufacture of beer.

SPECIFIC OUTCOME 4

Prevent microbial contamination.

SPECIFIC OUTCOME 5

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

5

Demonstrate knowledge of the packaging process and the trade

SAQA US ID	UNIT STANDARD TITLE		
119288	Demonstrate knowledge of the packaging process and the trade		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	12	Level 6	Regular

SPECIFIC OUTCOME 1

Demonstrate knowledge of packaging plant and process.

SPECIFIC OUTCOME 2

Demonstrate knowledge of the relationship between packaging and product quality.

SPECIFIC OUTCOME 3

Demonstrate knowledge of the supply chain from warehouse to customer.

SPECIFIC OUTCOME 4

Demonstrate knowledge of trade quality implications.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

6

Manage and Control Raw Materials

SAQA US ID	UNIT STANDARD TITLE		
119275	Manage and Control Raw Materials		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	25	Level 6	Regular

SPECIFIC OUTCOME 1

Select the suitable raw materials for use in the manufacture of beer

SPECIFIC OUTCOME 2

Manage and control the processing of raw materials.

SPECIFIC OUTCOME 3

Measure, analyse and interpret process data.

SPECIFIC OUTCOME 4

Identify non conformance.

SPECIFIC OUTCOME 5

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

7

Manage beer clarity

SAQA US ID	UNIT STANDARD TITLE		
119283	Manage beer clarity		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	10	Level 6	Regular

SPECIFIC OUTCOME 1

The principles of sedimentation and centrifugal sedimentation as applied to beer clarification are compared and contrasted.

SPECIFIC OUTCOME 2

Measure analyse and interpret process data.

SPECIFIC OUTCOME 3

Identify non conformance.

SPECIFIC OUTCOME 4

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

8

Manage effluent, waste and environmental factors

SAQA US ID	UNIT STANDARD TITLE		
119285	Manage effluent, waste and environmental factors		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	9	Level 6	Regular

SPECIFIC OUTCOME 1

Manage and control the effluent and waste treatment process.

SPECIFIC OUTCOME 2

Measure analyse and interpret process data.

SPECIFIC OUTCOME 3

Identify non conformance.

SPECIFIC OUTCOME 4

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

9

Manage yeast supply

SAQA US ID	UNIT STANDARD TITLE		
119277	Manage yeast supply		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	10	Level 6	Regular

SPECIFIC OUTCOME 1

Manage and control brewery yeast supply.

SPECIFIC OUTCOME 2

Measure analyse and interpret process data.

SPECIFIC OUTCOME 3

Identify non conformance.

SPECIFIC OUTCOME 4

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

10

Manage plant design and maintenance for a food or sensitive consumer manufacturing environment

SAQA US ID	UNIT STANDARD TITLE		
119280	Manage plant design and maintenance for a food or sensitive consumer manufacturing environment		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	8	Level 6	Regular

SPECIFIC OUTCOME 1

Analyse a manufacturing plant design, maintenance and product technology.

SPECIFIC OUTCOME 2

Manage and control improvements projects for plant design, maintenance and product technology.

SPECIFIC OUTCOME 3

Review improvement plan effectiveness.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

11

Manufacture wort

SAQA US ID	UNIT STANDARD TITLE		
119282	Manufacture wort		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	22	Level 6	Regular

SPECIFIC OUTCOME 1

Manage and control the brewhouse process.

SPECIFIC OUTCOME 2

Measure analyse and interpret process and quality data.

SPECIFIC OUTCOME 3

Identify non-conformance.

SPECIFIC OUTCOME 4

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

12

Mature and store green beer

SAQA US ID	UNIT STANDARD TITLE		
119287	Mature and store green beer		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	10	Level 6	Regular

SPECIFIC OUTCOME 1

Manage and control the beer maturation and storage process.

SPECIFIC OUTCOME 2

Measure, analyse and interpret process data.

SPECIFIC OUTCOME 3

Identify non conformance.

SPECIFIC OUTCOME 4

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

13

Optimise process technology

SAQA US ID	UNIT STANDARD TITLE		
119278	Optimise process technology		
SGB NAME		NSB 06	PROVIDER NAME
SGB Food		Manufacturing, Engineering and Technology	
UNIT STANDARD TYPE		FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Manufacturing, Engineering and Technology'	Manufacturing and Assembly
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	15	Level 6	Regular

SPECIFIC OUTCOME 1

Manage and control process technology.

SPECIFIC OUTCOME 2

Measure and analyse processing conditions used to manufacture beer.

SPECIFIC OUTCOME 3

Identify non conformance.

SPECIFIC OUTCOME 4

Manage and implement corrective actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

14

Optimise, the cleaning and sanitising of a beer manufacturing environment

SAQA US ID	UNIT STANDARD TITLE		
119284	Optimise the cleaning and sanitising of a beer manufacturing environment		
SGB NAME	NSB 06	PROVIDER NAME	
SGB Food	Manufacturing, Engineering and Technology		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Manufacturing, Engineering and Technology	Manufacturing and Assembly	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	10	Level 6	Regular

SPECIFIC OUTCOME 1

Manage and control the cleaning process.

SPECIFIC OUTCOME 2

Measure and analyse the effectiveness of the cleaning process.

SPECIFIC OUTCOME 3

Identify non-conformance of the cleaning process.

SPECIFIC OUTCOME 4

Manage and implement corrective action.