

Australian Government

Department of Education, Employment and Workplace Relations

## SFIPROC604C Plan and develop formulations and/or specifications for new seafood product

Release: 1



# SFIPROC604C Plan and develop formulations and/or specifications for new seafood product

### **Modification History**

Not Applicable

### **Unit Descriptor**

Unit descriptor	<ul> <li>This unit of competency involves developing, documenting and applying new production information. This may refer to formulations and specifications to modify production processes, the selection and purchasing of raw materials and to ensure compliances with relevant food safety requirements.</li> <li>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</li> </ul>
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### Application of the Unit

All enterprise or workplace procedures and activities are carried out according to <i>relevant government regulations</i> , <i>licensing and other compliance requirements</i> , including <i>food safety and hygiene regulations and procedures</i> and <i>ecologically sustainable development (ESD) principles</i> .
ecologically sustainable development (ESD) principles.

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

### **Pre-Requisites**

Prerequisite units		

Prerequisite units		

### **Employability Skills Information**

Employability skills	This unit contains employability skills.
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### **Elements and Performance Criteria Pre-Content**

essential outcomes of a	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.
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EI	LEMENT	PERFORMANCE CRITERIA		
1.	Gather and collate information regarding food and related product specifications	<ul> <li>1.1.<i>Information related to new product</i> specification is sought from production trials and/or laboratory tests.</li> <li>1.2. Existing specifications relating to new product components and/or process are collated and confirmed.</li> <li>1.3. End user requirements for specification/formulations are confirmed.</li> </ul>		
2.	Plan development of final formulation to achieve results within agreed timeframe	<ul> <li>2.1.<i>Requirements for development</i> of final formulation are established from product specifications and confirmed.</li> <li>2.2. Ingredients and/or processes required to produce product to profile are identified, costed and confirmed.</li> <li>2.3. Consistency of ingredient supply against specifications is confirmed.</li> <li>2.4. Constraints to formulation planning are identified and solutions proposed to minimise delay.</li> <li>2.5. Documentation of formulation is completed.</li> </ul>		
3.	Finalise and publish formulations and/or specifications	<ul> <li>3.1.Product formulation and specifications are clear, accurate and convey information critical to reproduction of product.</li> <li>3.2. Information regarding formulation and preparation of product is concise, accurate and in a format which meets <i>customer needs</i>.</li> <li>3.3. Customers are canvassed to ensure product developed from formulation meets specifications and/or requirements.</li> <li>3.4. Formulation and/or specifications developed meet relevant requirements.</li> </ul>		
4.	Record formulations and product specifications	<ul> <li>4.1.Product formulations and specifications are maintained and authorised changes are accurate and implemented in a timely manner.</li> <li>4.2.Publishing and maintenance of formulations and/or specifications are correctly completed.</li> <li>4.3.Personnel affected by changes in formulations or specifications are informed within timeframes which optimise efficiency of performance.</li> </ul>		

### **Elements and Performance Criteria**

### **Required Skills and Knowledge**

#### **REQUIRED SKILLS AND KNOWLEDGE**

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

#### **Required skills**

- collecting, recording and analysing data
- communicating with work teams, managers and/or customers
- identifying control points in accordance with enterprise food safety plan
- identifying suitable components and/or ingredients to match product specifications
- interpreting information from production trials, laboratory tests, standards and/or raw material specifications
- optimising processing and/or production equipment or facilities
- prioritising tasks and giving appropriate attention to detail
- solving problems.

#### Literacy skills used for:

- addressing cultural issues in written materials
- reading and interpreting information
- recording and interpreting data
- writing formulations and/or technical specifications.

#### Numeracy skills used for:

- calculating averages and percentages
- calculating volume, time and relationship between temperature, pressure and flow
- estimating costs.

#### **Required knowledge**

- allowable additives and basic food chemistry
- enterprise product costing methodology
- food regulations pertaining to the product
- food safety requirements and microbiology
- Hazard Analysis Critical Control Point (HACCP) and the enterprise food safety plan
- material safety data sheets (MSDS) information, and how to access
- requirements of a product specification.

### **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 evidence required to demonstrate competence in this unit	<ul> <li>Assessment must confirm the ability to:</li> <li>manage formulations and/or specifications to ensure continuing conformance with any change to regulations or food safety standards which may affect the product</li> <li>perform tasks necessary to develop formulations and/or specifications for a seafood product from information sought or supplied, and to present the information in a manner which supports the integrity of the finished product.</li> <li>Assessment must confirm knowledge of:</li> <li>enterprise expectations of the new or revised product</li> <li>food safety requirements, including HACCP planning needs</li> <li>relevant standards</li> <li>enterprise standard operating procedures (SOPs)</li> <li>location and use of MSDS</li> <li>location, availability and suitability of raw material inputs</li> </ul>
Context of and specific resources for assessment	<ul> <li>special language needs of the workforce.</li> <li>Assessment may be conducted in the workplace or in a simulated work environment.</li> <li>Resources may include: <ul> <li>access to enterprise expertise in production, processing and/or engineering</li> <li>enterprise HACCP plan</li> <li>enterprise SOPs</li> <li>food safety and other relevant standards</li> <li>MSDS</li> <li>product costing information sufficient to confirm relevant aspects of assessment</li> <li>relevant data/information from production trials</li> </ul> </li> </ul>

#### **EVIDENCE GUIDE**

and/or laboratory tests.

EVIDENCE GUIDE		
Method of assessment	<ul> <li>The following assessment methods are suggested:</li> <li>project (work or scenario based)</li> <li>workplace documents, such as logs, calculations and reports</li> <li>written or oral questions.</li> </ul>	
Guidance information for assessment	This unit may be assessed holistically with other units within a qualification.	

### **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.				
Relevant government regulations, licensing and other compliance requirements may include:	<ul> <li>ESD principles, environmental hazard identification, risk assessment and control</li> <li>food safety, HACCP, hygiene and temperature control along chain of custody</li> <li>imports quarantine and inspection, and importing approved arrangements for Australian Quarantine Inspection Service (AQIS), Australian Customs Service (ACS) and Biosecurity Australia (BA)</li> <li>business or workplace operations, policies and practices:         <ul> <li>commercial law, including fair trading and trade practices</li> <li>consumer law</li> <li>corporate law, including registration, licensing and financial reporting</li> <li>disability policies and practices</li> <li>equal opportunity, anti-discrimination and sexual harassment</li> <li>industrial relations and awards, individual employment contracts and share of catch</li> </ul> </li> </ul>			

RANGE STATEMENT	
	<ul> <li>agreements</li> <li>jurisdictional variations</li> <li>superannuation</li> <li>taxation</li> <li>trade practices</li> <li>warnings and dismissals</li> <li>worker's compensation</li> <li>occupational health and safety (OHS) hazard identification, risk assessment and control</li> <li>product quality assurance: <ul> <li>correct naming and labelling (e.g. country of origin, Australian Fish Names Standard and eco-labelling)</li> <li>correct quantities, sizes and other customer requirements</li> <li>third-party certification (e.g. Australian Grown and ISO 14001:2004 Environmental management systems).</li> </ul> </li> </ul>

RANGE STATEMENT	
KANGE STATEMENT Food safety and hygiene regulations and procedures may include:	<ul> <li>Australian Shellfish Sanitation program</li> <li>display, packaging and sale of food, including seafood and aquatic products</li> <li>equipment design, use, cleaning and maintenance</li> <li>export Control (Fish) orders</li> <li>handling and disposal of condemned or recalled seafood products</li> <li>HACCP, food safety program, and other risk minimisation and quality assurance systems</li> <li>location, construction and servicing of seafood premises</li> <li>people, product and place hygiene and sanitation requirements</li> <li>Primary Products Standard and the Australian Seafood Standard (voluntary)</li> <li>processing, further processing and preparation of food, including seafood and aquatic products</li> <li>receipt, storage and transportation of food, including seafood and aquatic products</li> <li>requirements set out in Australian and New Zealand Food Authority (ANZFA) Food Standards Code and state and territory food regulations</li> </ul>
	<ul> <li>temperature and contamination control along chain of custody.</li> </ul>
<i>ESD principles</i> may include:	<ul> <li>increasing use of renewable, recyclable and recoverable resources</li> <li>managing environmental hazard identification, risk assessment and control</li> <li>managing, controlling and treating effluents, chemical residues, contaminants, wastes and pollution</li> <li>minimising noise, dust, light or odour emissions</li> <li>planning environmental and resource efficiency improvements</li> <li>reducing emissions of greenhouse gases</li> <li>reducing use of non-renewable resources</li> <li>reducing energy use and introducing alternative energy sources.</li> </ul>

RANGE STATEMENT			
<i>Information related to new</i> <i>product</i> may come from:	<ul> <li>a need to address new quality standards</li> <li>customer requests</li> <li>external sources</li> <li>MSDS</li> <li>new product concepts</li> <li>pre-production trials.</li> </ul>		
<b>Requirements for development</b> may include:	<ul> <li>training needs</li> <li>marketing considerations</li> <li>meeting OHS and food safety regulatory requirements</li> <li>packaging production</li> <li>production planning</li> <li>selection of suppliers</li> <li>supply of raw materials.</li> </ul>		
Customer needs may include:	<ul> <li>formulation data and specifications, and preparation instructions for internal staff</li> <li>information in a format understood by staff</li> <li>specific country labelling requirements.</li> </ul>		

### **Unit Sector(s)**

Unit sector	Seafood processing
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### **Co-requisite units**

Co-requisite units	

### **Competency field**