

Product Specification: Frozen Whole Langoustines – 750g
Scientific Name: *Nephrops norvegicus*

Contact Details



Macduff Shellfish (Scotland) Ltd
Station Road
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Product Information

Product Name	Frozen Whole Langoustines
Scientific Name	<i>Nephrops norvegicus</i>
Vessel Catch Details	Caught Using Otter Twin Trawl
Processing Details	Langoustines are size graded, packed into trays, passed through a fresh water glaze, frozen, labelled, metal detected and packed into boxes at the Mintlaw processing facility
Ingredients	Whole Langoustines/ Sodium Metabisulphate
Allergens	Shellfish (Crustacean) / SO2
Preparation Instructions	Cook fully prior to consumption. Do not refreeze thawed product.
Shelf Life	24 Months

Quality Control Standards

Defect Types

- **Food Safety Defect:** Any defects that may pose a risk to consumers of the product. These defects include objectionable material (metal, wood, plastic, etc) as well as shells.
- **Process Defect:** These defects are caused by the processing equipment. The Processing Facility can manage process defects by making adjustments to production settings, either equipment adjustments or production flow.

Spec Number: PRD_030c
Author: Kati Reisel

Revision Number: 003
Validator: Iona Cameron

Revision Date: 21st November, 2019
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Defect	Definition	Testing State	Maximum Defect Level per 1Kg
Food Safety Defects			
		Frozen	
Objectionable Matter	Any object not associated with the product (metal, plastic, wood)	Frozen	0

Defect	Definition	Testing State	Maximum Defect Level per 1Kg
Process Defects			
Melanosis	Melanosis is not permitted	Fresh/Frozen	Absent
Green Sack	Green Sac may be present	Fresh/Frozen	Acceptable
Berries / Eggs	Berries / Eggs may be present	Fresh/Frozen	Acceptable
Broken Heads	No Broken Heads Permitted	Fresh/Frozen	2 Permitted

Control Point	Method	Testing State	Accept
Inspection & Testing Criteria			
Labelling	Visual: Sign off by Label Technician, QC, and Production Staff. Single weight labels used (750g Net weight printed on the tray labels, 4.5Kg Net weight printed on the case labels).	N/A	Compliant
Packaging	Visual	N/A	Compliant
Product Core Temperature	Regular Temperature Checks completed	Fresh & Frozen	<5°C <-18°C
Glaze	25% - Glaze Checks completed	Frozen	Compliant
SO2 Residue	SO2 tests on all Intake Batches and weekly tests to External Lab	Fresh	Compliant
Weights	Weights checked regularly by QC/Production Staff	Fresh/Frozen	Compliant

Attribute	Testing State	Accept
Organoleptic Properties		
Colour	Thawed/Cooked	Bright Shell, Pale pink to pink/orange-red. Meat white, clean
Odour	Thawed/Cooked	Mild shellfish smell. Marine, sea weedy
Flavour	Thawed/Cooked	Very/ intensely sweet. metallic
Texture	Thawed/Cooked	Hard Shell, flesh moist. Good bite to flesh, firm meat

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Test	
SO2 Analysis – Performed In House and External at Eurofins Grimsby Laboratory	
SO2 - Internal	Sampled Daily - <150ppm
SO2 - External	Sampled Weekly - <150ppm

Nutritional Information	Composition per 100g
Nutritional Analysis – Performed Externally at Eurofins Grimsby Laboratory – August 2018	
KJ/kcal	286/67
Protein	15.4g
Carbohydrate	1.4g
Of Which Sugars	<0.1g
Fat	<0.2g
Of which saturates	<0.1g
Fibre	<0.6g
Salt Equivalent	0.85g
Of which Sodium	0.34g

Test	
Heavy Metal Tests – Performed Externally at Eurofins Wolverhampton Laboratory	
Lead	Sampled Annually – 0.50mg/Kg
Cadmium	Sampled Annually – 0.50mg/Kg
Mercury	Sampled Annually – 0.50mg/Kg

Test	Target	Unsatisfactory
TVC	<5.0 x 10 ⁴	>5.0 x 10 ⁵
Escherichia coli	< 10	>100
Staphylococcus aureus	< 50	>100
Salmonella	Not Detected	Present

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Allergen Information

Allergens and Sensitive Questions:			
Allergen Info	Present in Product	Present on Site	Source
1 – Celery/Celery	X	X	
2 – Egg/Egg Products	X	X	
3 – Fish/Fish Products	X	✓	King Scallop by catch handled on site
4 – Wheat Gluten	X	X	
5 – Rye Gluten	X	X	
6 – Barley Gluten	X	X	
7 – Oat Gluten	X	X	
8 – Spelt Gluten	X	X	
9 – Kamut Gluten	X	X	
10 – Milk/Milk Products	X	X	
11 – Mustard/Mustard Products	X	X	
12 – Nuts/Nut Products	X	X	
13 – Peanuts/Peanut Products	X	X	
14 – Sesame Seed/Sesame Products	X	X	
15 – Crustacea	✓	✓	Langoustines, Brown Crab and Velvet Crab Present on site – segregation in place
16 – Molluscs	X	✓	Scallops and Whelks (seasonal) are on site – segregation in place
17 – Soya/Soya Products	X	X	
18 – Sulphites	✓	✓	Sodium Metabisulphite used on site for Prawns
19 – Lupin/Lupin Products	X	X	
20 – Pine Nuts/Pine Kernels	X	X	
21 – Coconut	X	X	
22 – Yeast/Yeast Extract			
ADDITIVES			
23 – Genetically Modified Ingredients	X	X	
24 – Additives	X	X	
25 – Preservatives	X	X	
26 – Natural Colour(s)	X	X	
27 – Artificial Colour(s)	X	X	
28 – Natural Flavourings	X	X	
29 – Artificial Flavouring(s)	X	X	
30 – Antioxidants	X	X	
31 – Artificial Sweeteners	X	X	

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Packaging Information

Size Grade

Grade Per Kg Net	Pieces per tray
8 - 10	4 - 7
8 - 10	4 - 8
10 - 12	6 - 9
12 - 15	8 - 12
16 - 20	13 - 16
21 - 30	17 - 20
31 - 40	21 - 30
40+	31 - 40

Pack Formats

Units Per Box	Weight Per Unit	Master Weight
6	1Kg	6Kg
Glaze %	Weight (Net) per Tray	Glazed product Weight per Tray
25%	750g	1Kg

Packaging Details

Attribute	Details
Primary	Black 1Kg Tray (APET/RPET) – 315 x 151 x 65mm
Secondary	Cardboard Outer Case – 450(l) x 314(w) x 124(h) mm
Film	K-SEAL Top Seal film
Pallet Configuration	84 cases (14 layers, 6 cases on a layer) / 90 cases (15 layers, 6 cases on a layer).
Storage Conditions	Product must have a minimum core temperature of -18°C. In cold storage product must be stored in a minimum temperature of -18°C. Frozen product should remain packaged or covered during storage.

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Langoustine Color Guide – Frozen



Green Sac



Green Sack Chart – Heavier months May to September

	January	February	March	April	May	June	July	August	September	October	November	December
Availability	Orange	Orange	Orange	Orange	Red	Green	Green	Green	Green	Orange	Orange	Red
Soft shell/green sack presence (3) High (2) Medium (1) Low	1	1	2	2	3	3	3	3	3	2	1	1

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Eggs/Berries



Langoustine Defects

Melanosis



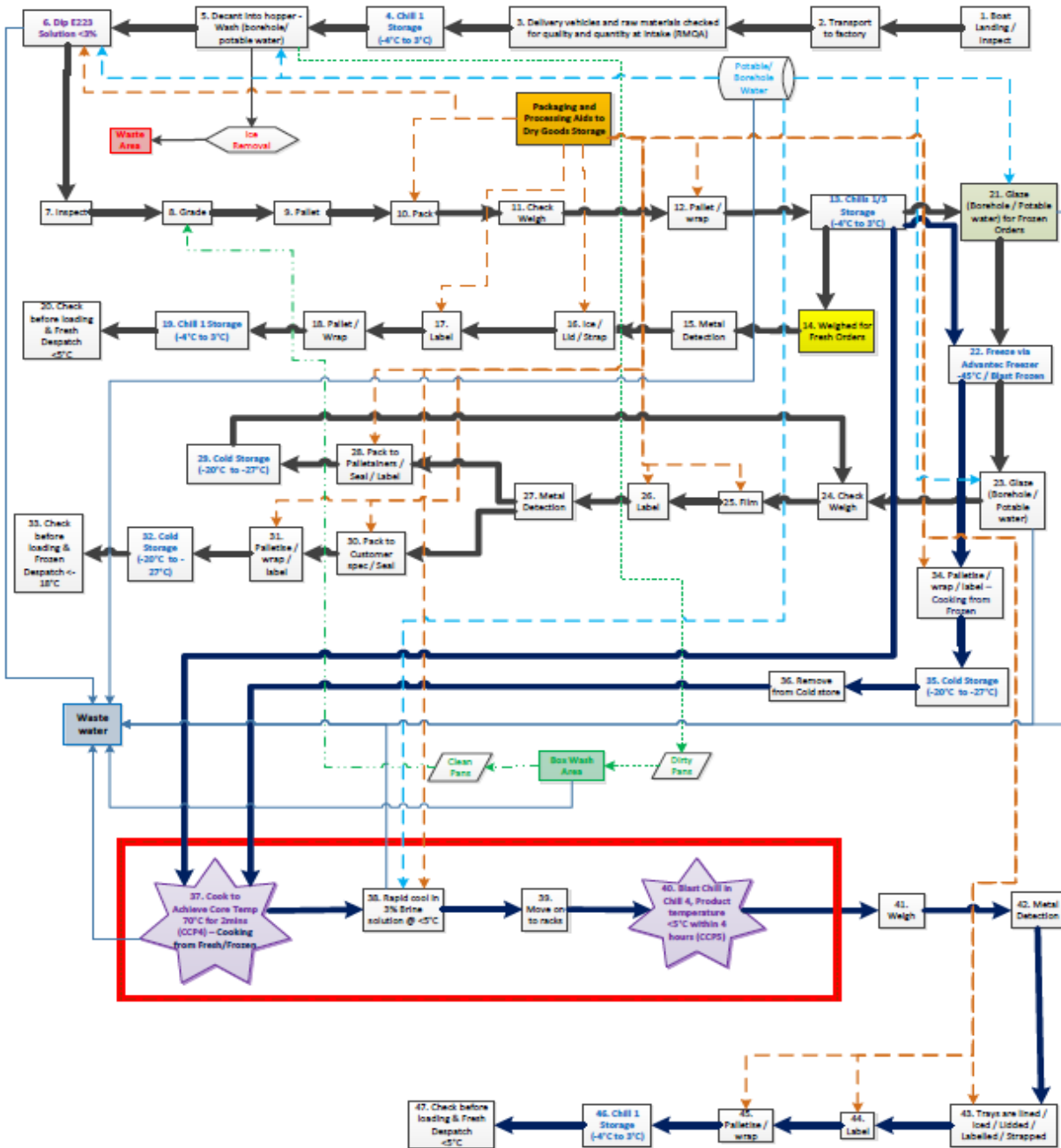
Broken Heads



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Whole Langoustine Process Flow Diagram



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Primary Packaging

Black 1Kg Tray (APET/RPET) – 315 x 151 x 65mm



Secondary Packaging

Cardboard – 450(l) x 314(w) x 124(h)mm Outer Carton



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Revision Log

Revision Number	Description of Edits	Editor	Approved By	Date
001	Specification Created	Kati Reisel	Iona Cameron	30/05/2019
002	Amended – Flow diagram, new product photos, heavy metal limits added	Kati Reisel	Iona Cameron	27/08/2019
003	Amended – Labelling info, single weight labels used	Kati Reisel	Iona Cameron	21/11/2019

Approval

Name	Signature	Position	Date
Iona Cameron		Head Of Quality	
Duncan Watt		Head Of Operations	
John Stott		Business Development Director	

Specification Approved By Customer:

Sign:

Date:

Please return a signed copy of the specification by email or fax to i.cameron@macduffshellfish.co.uk

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