

Technical Specification				
Product: Last Update: Product Code:				
Chopped Kale 10MM IQF	31/01/2023	KAL002		

PACK SIZE 1 x 10kg;

ORIGIN: China, Turkey

GENERAL The product shall be prepared from fresh sound raw material that is free from all toxic residues and taints and shall comply with all current UK/EU Food Legislation. The product is intended to be used as ingredient that is further processed and heat-treated before final consumption (minimum of +75°C for 30 seconds).

INGREDIENTS	Kale 100%	100%	Declare as: Kale
			(Brassica oleracea)

<u>**PROCESSING</u>** Kale leaves are delivered to the factory, cleaned, inspected, washed, coarsely chopped, blanched, cooled, frozen and stored in bulk pallets at -18° C or below until required for re-packing.</u>

PACKING During packing, the kale is inspected before weighing and filling into blue poly lined cartons. The cartons are Best Before and Production date coded, check weighed and metal detected, palletised and stretch-wrapped before being returned to cold store at -18° C, until despatched at -18° C.

DEFECT TOLERANCES

<u>Per 300g</u>	Maximum
Clumps	5%w/w
Foreign Matter	Nil
EVM (excluding stalk)	2
Stalk	30%w/w
Major Blemish	4
Minor Blemish	8
Colour variant	3%w/w
Out of Size	15%w/w

DEFINITIONS OF DEFECTS

<u>Clumps</u>

A clump is defined as an agglomeration of leaves welded together which cannot be readily separated without causing damage to the leaves.

Foreign Material

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This includes any material not derived from the kale plant, or defined as EVM, Examples of foreign matter include insects, pieces of insect, wood, glass, stones, sand, metal, snails, slugs etc. unacceptable.

Extraneous Vegetable Matter (EVM)

This includes any harmless vegetable matter other than kale leaves that is not derived from the kale plant.

Major Blemish

A major blemish is a discoloured area (other than green) either as a single blemish or as an aggregate of blemishes covering an area greater than 6mm diameter.

Minor Blemish

A minor blemish is a discoloured area (other than green) either as a single blemish or an aggregate of blemishes covering an area of less than 6mm diameter. Single blemishes below 2mm shall be ignored.

Colour Variant

These are kale leaves that have a distinct yellow colouration or any unnatural colour that is not the typical dark/olive green of the product.

Out of Size

These are units whose length is either greater than 15mm or smaller than 5mm

ORGANOLEPSIS (Carried out on a thawed sample.)

- <u>COLOUR</u> Characteristic dark/olive green almost completely uniform throughout the sample.
- **FLAVOUR** Pleasant, mild kale taste. No bitter nor stringent.

TEXTURE Firm to the bite.



Average sample

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MICROBIOLOGICAL

Organism	Target	Maximum
T V C @ 30°C	1 x 10 ⁵	1 x 10 ⁶
Total Coliforms	1 x 10 ²	3 x 10 ³
E. coli	Nil	1 x 10 ²
Listeria mono	Absent in 25g	1 x 10 ²
Salmonella	Absent in 25g	Absent in 25g

<u>ANALYTICAL</u> Product shall be blanched to give a trace positive peroxidase reaction (guaiacol test) between 60 and 90 seconds.

WEIGHT CONTROL The product shall be packed to minimum weight.

METAL DETECTION All cartons shall be passed through a metal detector. The system shall be tested at least every 2 hours using ferrous, non-ferrous and stainless-steel test pieces.

BEST BEFORE DATE The product shall be twenty-four months following the month of packing. Minimum BB date on delivery: 6 months.

TRACEABILITY INFO Production date or Lot number printed on the label as well as customer order number and/or delivery date.

STORAGE CONDITIONS Keep frozen at - 18°C at all times.

<u>CARTON LINERS</u> Blue food grade polythene liner of a minimum thickness of 30µm.

<u>CARTONS</u> Corrugated fibreboard of glued construction, no metal staples to be used. Shall be sealed using blue adhesive tape.

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NUTRITIONAL INFORMATION

This data conforms to the requirements of EC Council Directive 90/496/EEC

100g of uncooked kale typically contains: -

Parameter	Value / 100g	Methodology
Energy - kcal	33	McCance & Widdowson 7 th Edition
Energy - kJ	140	McCance & Widdowson 7 th Edition
Moisture	88.4g	McCance & Widdowson 7 th Edition
Carbohydrate	1.4g	McCance & Widdowson 7 th Edition
- as sugars	1.3g	McCance & Widdowson 7 th Edition
- as polyols	0.0g	McCance & Widdowson 7 th Edition
- as starch	0.1g	McCance & Widdowson 7 th Edition
Fat	1.6g	McCance & Widdowson 7 th Edition
- as saturates	0.2g	McCance & Widdowson 7 th Edition
- as mono unsaturates	0.1g	McCance & Widdowson 7 th Edition
- as poly unsaturates	0.9g	McCance & Widdowson 7 th Edition
Protein	3.4g	McCance & Widdowson 7 th Edition
Fibre	3.1g	McCance & Widdowson 7 th Edition
Sodium	43mg	McCance & Widdowson 7 th Edition
Vitamin A	Оµд	McCance & Widdowson 7 th Edition
Vitamin B ₆	0.26mg	McCance & Widdowson 7 th Edition
Vitamin B ₁₂	Оµg	McCance & Widdowson 7 th Edition
Vitamin C	110mg	McCance & Widdowson 7 th Edition
Vitamin D	0.0µg	McCance & Widdowson 7 th Edition
Vitamin E	1.70mg	McCance & Widdowson 7 th Edition
Thiamin	0.08mg	McCance & Widdowson 7 th Edition
Riboflavin	0.09mg	McCance & Widdowson 7 th Edition
Niacin	1.0mg	McCance & Widdowson 7 th Edition
Folic Acid	120µg	McCance & Widdowson 7 th Edition
Biotin	0.5µg	McCance & Widdowson 7 th Edition
Pantothentic Acid	0.09mg	McCance & Widdowson 7 th Edition
Calcium	130mg	McCance & Widdowson 7 th Edition
Phosphorus	61mg	McCance & Widdowson 7 th Edition
Iron	1.7mg	McCance & Widdowson 7 th Edition
Magnesium	34mg	McCance & Widdowson 7 th Edition
Zinc	0.4mg	McCance & Widdowson 7 th Edition
lodine	Оµд	McCance & Widdowson 7 th Edition
Potassium	450mg	McCance & Widdowson 7 th Edition

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GMO DECLARATION

I confirm that this product is not genetically modified or produced from genetically modified organisms. No genetically modified organisms have been used as processing aids or additives. This product does not require specific GM labelling as per Regulation (EC) 1829/2003.

Name: Gianluca Oberto

Signature:

Job Title: Technical Manager

Date: 31st January 2023

IRRADIATION POLICY

I confirm that the product supplied by Foodnet Limited under this specification has not undergone any irradiation treatment or process. I further confirm that no ingredient or processing aid used in conjunction with this product has undergone irradiation treatment.

Name: Gianluca Oberto Signature: Job Title: Technical Manager

Date: 31st January 2023

COSHH Data

Treat as you would any frozen material i.e. if engaged in prolonged handling of the fruit wear gloves.

Care should be used when lifting full cases of frozen fruits.

There are no other perceived COSHH implications regarding the use of frozen fruits.

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FOOD INTOLERANCE

Allergen	NO / YES	Reason for presence if YES
1ilk & Milk Derivatives	NO	
gg & Egg Derivatives	NO	
nimal Products (*)	NO	
ish/Shellfish/Crustations/Molluscs	NO	
ereals (**)	NO	
Bluten	NO	
'east/Yeast Extract	NO	
oya/Soya Derivatives	NO	
ruit & Fruit Derivatives	NO	
Beef & Beef Products	NO	
Pork & Pork Products	NO	
amb & Lamb Products	NO	
Poultry & Poultry Products	NO	
egumes	NO	
Peanuts	NO	
ulphite >10ppm	NO	
ASG	NO	
вна / внт	NO	
Benzoates	NO	
ilutamates	NO	
Azo & Coal Tar Dyes	NO	
Added Colour	NO	
dded Flavour	NO	
Preservatives	NO	
Antioxidants	NO	
Added Salt	NO	
luts/Nut Oils	NO	
Caffeine	NO	
esame Products	NO	
arlic	NO	
oppy Seeds	NO	
Austard	NO	
Celery/Celeriac	NO	
upins	NO	

*Including any product derived from slaughtere
**Including wheat, corn, barley, rye, oats, etc.

<u>Please be aware the manufacturing sites we supply this item from may handle allergens in production.</u> Procedures are in place to prevent cross-contamination.

Is this product Suitable for:					
Vegans	Yes (Not certified)	Vegetarians	Yes	Organic	No
Halal	Yes (Not certified)	Kosher	Yes (Not certified)		

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FOOD ADDITIVES

E. Number	Name	In Which Ingredient	Function in Ingredient	Function in Final Product	% In Final Product
None					

THE CONTENTS OF THIS SPECIFICATION ARE CONFIDENTIAL TO FOODNET LTD AND THE CUSTOMER, AND MAY NOT BE DISCLOSED TO ANY OTHER PARTY.

Signed on behalf of Foodnet Ltd:

Name: Gianluca Oberto

Signature:

Job Title: Technical Manager

Date: 31st January 2023

Signed on behalf of the Customer:

Name:

Job Title:

Signature:

Date:

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PROCESS INFORMATION

PROCESS FLOW CHART*

*Note: this is a generic flow chart which does not refer to any specific production site.

KALE CHOPPED

Raw Material Receipt \rightarrow QA Check \downarrow Inspection \downarrow Washing \downarrow Cutting \downarrow Blanching \downarrow Cooling \downarrow Cutting \downarrow Freezing \rightarrow -18°C QA Check \downarrow Cold Storage \rightarrow -18°C \downarrow Tipping \downarrow Inspection \downarrow Carton Fill \rightarrow QA Check \downarrow Check Weigh \downarrow Metal Detection \rightarrow QA Check \downarrow Palletise \downarrow Cold Storage \rightarrow -18°C \downarrow Despatch \rightarrow -18°C

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Issues & Amendments

Issue	Amend.	Date	Amendments	Compiled by
N°	N°			
1	1	01/02/2016	New entry	G. Oberto
			Defect tolerances – minimum ref samples; Reviewed BB and Traceability info. Added Storage Conditions.	
2	1	01/05/2017	Reviewed Food Intolerance table, Flow Chart and Amendment table.	G. Oberto
3	1	31/01/2020	3 Year update – general revision	G. Oberto
4	1	31/01/2023	3 Year update – general revision	F. Soares

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