

PRODUCT SPECIFICATION

Greenshell™ Mussel Powder

1	Name	Greenshell™ Mussel Powder												
2	Code	MUSFPO5.1												
3	Form	Powder												
4	Description	A free flowing variable fawn to brown powder with a characteristic mussel odour. It is 100% pure freeze dried New Zealand Greenshell™ Mussel (<i>Perna canaliculus</i>) mussel powder and contains no additives. It is suitable for hard gel encapsulation.												
5	Container	The powder is heat sealed into foil bags which are contained within high strength cardboard cartons. The net weight of each unit is 10 kilograms.												
6	Label	The 10 kilogram boxes have labels placed on top of each carton, as well as an address label. These labels will comply with NZFSA ⁶ requirements, so will include details such as the batch number, species name, product name, expiry etc.												
7	Packaging	The powder is packed into a foil pouch within a high strength cardboard carton. Cartons are glued and sealed top & bottom with wide ribbon sealing tape, and double strapped with a 12mm plastic heat sealed band. Cartons are shrink wrapped onto pallets, and stacked to the height determined by the shipping company. A single domestic address label is adhered to the shrink wrapping of each pallet at dispatch.												
8	Ingredients	100% pure freeze dried flesh of New Zealand Greenshell™ Mussel (<i>Perna canaliculus</i>) mussel powder. There are no additives, and only water is removed in the drying process.												
9	Microbiology	<table> <tr> <td>Total aerobic plate count</td> <td>≤ 5 x 10⁴ CFU/g¹</td> </tr> <tr> <td>Yeast and moulds</td> <td>≤ 1.5 x 10² CFU/g¹</td> </tr> <tr> <td>Coliforms</td> <td>≤ 10 CFU/g¹</td> </tr> <tr> <td><i>E. Coli</i></td> <td>not detected per gram</td> </tr> <tr> <td><i>Salmonella</i></td> <td>absent in 25 grams</td> </tr> <tr> <td><i>Staphylococcus aureus</i></td> <td>< 10² CFU/g¹</td> </tr> </table>	Total aerobic plate count	≤ 5 x 10 ⁴ CFU/g ¹	Yeast and moulds	≤ 1.5 x 10 ² CFU/g ¹	Coliforms	≤ 10 CFU/g ¹	<i>E. Coli</i>	not detected per gram	<i>Salmonella</i>	absent in 25 grams	<i>Staphylococcus aureus</i>	< 10 ² CFU/g ¹
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10	Analysis	Moisture < 4% Mesh size Suitable for Encapsulation ² Bulk Density ≥ 370 g/1000ml Ash (residue on ignition) 5% - 11 % (w/w) (typical result) Lead < 5.0 ppm ³ Chromium < 3.0 ppm ³ Cadmium < 2.5 ppm ³ Mercury < 0.5 ppm ³ Total Arsenic ≤ 10 ppm ³
11	Shelf Life	Two years from the date of manufacture, subject to suitable storage conditions being maintained. The powder will absorb moisture when exposed to the atmosphere. Unused bags should be resealed.
12	Other/ Miscellaneous	<p>Suitable for encapsulation</p> <p>The term “suitable for encapsulation” (as in section 10 above) means that 90% of the powder will pass (by agitation) through a 425 micron sieve, and separately 70% will pass (by agitation) through a 300 micron sieve, and that in other respects the powder is suitable for encapsulation into hard gelatine capsules.</p> <p>Pesticide Residue sampling regime</p> <p>Samples of this material are to be tested not less than once per year to show that pesticide residues, DDT⁴ and its isomers and PCB's⁵ are not detected. This testing will be undertaken by the Agriquality laboratory at Lynfield in Auckland New Zealand to the detection limits applicable at the time. Results of this analysis will be available upon request.</p> <p>Government Certification</p> <p>Each shipment batch of product will be accompanied by an export certificate issued by NZFSA⁶ if required. We can also send shipments accompanied with an E. cert if this is domestic product transferring between registered premises.</p> <p>Risk Management Program</p> <p>The powder will be manufactured under Nutrizeal's registered Risk Management Program as approved by the New Zealand Food Safety Authority and audited by the NZFSA⁶ Verification Agency.</p> <p>Certificate of Analysis</p> <p>A certificate of analysis will be issued by Nutrizeal for each shipment batch of product. Representative samples of product are tested as part of a comprehensive regime of quality control under Nutrizeal's Risk Management Program. The program is designed to ensure that all product is audited against</p>

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		<p>specification. However sampling and analysis regimes are set individually for each parameter. Results provided for some parameters on the certificate will therefore be specific to the shipment batch, whilst results for other parameters may be shared with other shipment batches. Nutrizeal issues its Certificates of Analysis as documents that accurately describe the status of the product so certified.</p> <p>Laboratory certificates used to compile the Nutrizeal certificate will be available upon request. Sampling and analysis regimes are also available on request.</p>
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¹ Colony forming units per gram

² See also section 12 above

³ parts per million (equal to milligrams per kilogram)

⁴ Dichlorodiphenyltrichloroethane

⁵ Polychlorinated Biphenyls