

## OXIFEND® BLACKCURRANT EXTRACT

### PRODUCT SPECIFICATION

Product:	<b>Oxifend Blackcurrant Extract</b>
Product code:	XBC
Country of origin	New Zealand (raw material and manufacture)
Product description	Oxifend® Blackcurrant Extract is a high quality extract from sustainably grown New Zealand blackcurrants. A purple / black free flow powder high in natural phenolics (anthocyanins), manufactured using New Zealand Extracts unique 100% Aqua Pure® extraction process.
Botanical description:	<i>Ribes nigrum</i>
Other name:	blackcurrant
CAS number:	68606-81-5
Plant part:	whole fruit, skins and seeds
Solvent:	potable water
Equivalence:	fruit:extract 200:1
Plant preparation:	wash, extract, concentrate, freeze-dry
Excipient:	none
GMO:	non-GMO
Minimum recommended dosage:	500 mg per serve

### Physical, analytical and microbiological detail

Test	Specification	Method
Appearance	Purple/black fine powder	Visual
Taste	Astringent	Sensory evaluation
Odour	Light berry	Sensory evaluation
Active ingredients	> 200 mg/g phenolics	AOAC 952.03 OMA online (mod)
Mesh size*	> 95% through 40 mesh	Pass
Loss on drying	< 5%	BP or USP loss on drying method
Water activity	< 0.25	AquaLab Operator's manual
Pesticides residue	Complies with MRL limits for markets as specified by MPI managed database when read in conjunction with independent laboratory pesticide test results	Solvent extraction, SPE cleanup, GC-MS/MS and LC-MS/MS analysis <a href="https://www.mpi.govt.nz/resources-and-forms/registers-and-lists/maximum-residue-levels-database/">https://www.mpi.govt.nz/resources-and-forms/registers-and-lists/maximum-residue-levels-database/</a>
Lead (Pb)	< 3.0 ppm	Biological materials digestion ICP-MS
Mercury (Hg)	< 0.1 ppm	Biological materials digestion ICP-MS
Arsenic (As)	< 3.0 ppm	Biological materials digestion ICP-MS
Cadmium (Cd)	< 1.0 ppm	Biological materials digestion ICP-MS
Solubility in water	> 95%	In-house method
Aerobic Plate Count	< 2,000 cfu/g	APHA 8.72 5th Ed
Yeasts and molds	< 2,000 cfu/g	APHA 21.5 (modified) 5th Ed
<i>Escherichia coli</i>	Negative/10g	APHA 9.93 (modified) 5th Ed
<i>Salmonella</i>	Negative/10g	ISO 6579-1:2017
<i>Staphylococcus aureus</i>	Negative/10g	APHA 39.6 (modified) 5th Ed
Shelf Life	24 months (2 years unopened)	
Packing	2 x 10 kg, total net 20 kg, heat sealed, nitrogen flushed, foil laminate bags within individual cartons and then packed together in a heavy-duty cardboard outer.	
Storage	In a cool, dry place away from light	
Certification	Kosher certification is available on request	

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