



# Oxi-fend®

## PRODUCT SPECIFICATION

**Oxi-fend®**  
curanza  
New Zealand Blackcurrant Extract

Product Description		Oxi-fend® Curanza blackcurrant extract – water extracted	
Extract from:	Botanical name	<i>Ribes nigrum</i>	
	Other name	Blackcurrant	
	Plant part	Fruit	
	Source	Commercial – GMO free	
	Origin	New Zealand	
	Identification	HPLC	
Extract Ratio (fruit: powder)		200: 1	
Preparation		Wash, extract, concentrate, freeze dry	
Solvent used		Water	
Shelf life		24 months	
Storage		In a cool, dry place away from light	
Packing		In 10kg cardboard boxes, foil lined	
Certification		Kosher	
Test	Specification	Method	
Appearance	Purple	Visual	
Taste	Astringent	Sensory evaluation	
Odour	Light berry aroma	Sensory evaluation	
Active ingredients	> 80 mg/g polyphenols, consisting of: Delphinidin glucoside > 2 mg/g Delphinidin rutinoside > 6 mg/g Cyanidin glucoside > 1 mg/g Cyanidin rutinoside > 6 mg/g	Folin AOAC 15 <sup>th</sup> Ed 952.03 HPLC HPLC HPLC HPLC	
Antioxidant activity: ORAC	> 5 000µmol Trolox Equivalents/g	ORAC	
Cell protection assay	< 5 µg/ml	EC50, human monocyte protection	
Mesh size	95% through 40 mesh	Screen	
Loss on drying	< 5%	AOAC 12 <sup>th</sup> Edn 950.26 Mod	
Pesticides residue	Nil detect for the residues of 200 commonly used agrichemicals.	GC-ECD/NPD confirmed by GC-MS	
Heavy metals	< 1.0 ppm	AOAC 935.13 mod/APHA 3120B Acid dig. ICP-OES	
Arsenic	< 2.0 ppm	AOAC 935.13 mod/APHA 3120B Acid dig. ICP-OES	
Solubility in water	100%		
Total plate count	< 100/g	Compendium 4 <sup>th</sup> Edn 2001	
Moulds	< 200/g	Compendium 4 <sup>th</sup> Edn 2001	
Yeasts	< 200/g	Compendium 4 <sup>th</sup> Edn 2001	
<i>E. Coli</i>	Nil	Compendium 4 <sup>th</sup> Edn 2001	
<i>Salmonella</i>	Nil	Compendium 4 <sup>th</sup> Edn 2001	
<i>Pseudomonas</i>	Nil	Compendium 4 <sup>th</sup> Edn 2001	
Faecal coliforms	Nil	Compendium 4 <sup>th</sup> Edn 2001	
<i>Staphylococcus aureas</i>	Nil	Compendium 4 <sup>th</sup> Edn 2001	
Test	Specification	Method	
Appearance	Purple	Visual	
Taste	Astringent	Sensory evaluation	
Odour	Light berry aroma	Sensory evaluation	
Authorised by: Glenn Vile (PhD) (Quality Assurance)	Checked by: Bruce Cardwell (General Manager)		
Signature:	Signature:		
			
Date: 25 <sup>th</sup> January 2008	Date: 25 <sup>th</sup> January 2008		

