

DIGESTEN® KIWIFRUIT COMPLEX

PRODUCT SPECIFICATION

Product:	Digesten Kiwifruit Complex
Product code:	XDC
Country of origin:	New Zealand
Product description:	Digesten® Kiwifruit Complex is a proprietary blend of kiwifruit enzyme powder and kiwifruit skin extract. Light green/brown in colour, mildly astringent in taste, and high in natural polyphenols, soluble fibre and actinidin (protease) enzyme.
Botanical description:	<i>Actinidia deliciosa</i>
Other name:	kiwifruit
CAS number:	kiwifruit 92456-63-8
Plant part:	flesh* and skin
Solvent:	potable water
Equivalence:	fruit:extract 16:1**
Plant preparation:	wash, extract, concentrate, freeze-dry, blend
Excipient:	silicon dioxide (2.5% w/w)
GMO:	non-GMO
Minimum recommended dosage:	500-1000 mg per serve

Physical, analytical and microbiological detail

Test	Specification	Method
Appearance	Light green / brown powder	Visual
Taste	Mildly astringent	Sensory evaluation
Odour	Light aromatic	Sensory evaluation
Actinidin activity	> 12,000 AU/g	Azocasein extraction, MacDonald & Associates
Actinidin	> 1.5 mg/g	Azocasein extraction, MacDonald & Associates
Soluble dietary fibre	> 150 mg/g	AOAC 985.29 OMA online
Active ingredients	> 15 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 https://www.mpi.govt.nz/resources-and-forms/registers-and-lists/maximum-residue-levels-database/
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	< 10,000 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, 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	

NOTE: Individuals who are allergic to kiwifruit may also be allergic to products containing Digesten® Kiwifruit Complex.

* green flesh minus skin, seeds, and calyx, otherwise the ratio from whole fruit to powder is 10:1

** Kiwifruit Enzyme powder: fruit: powder 10:1; & Kiwifruit Skin extract: fruit: powder 250:1. Blend equivalence fruit: powder 70:1

Date of Issue: 21st November 2023

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