

New Holland Extraction Ltd. Product Specification

Product: Wheatgerm Oil, Unrefined – Non-Food Grade

INCI Name: Triticum aestivum (Wheat) Germ Oil

Description: A yellowish to brown oil, typical in taste and smell.

Analytical Characteristics

Acid Value (mg KOH/kg)	< 40.0
Free Fatty Acid %	< 20.0
Peroxide Value (meq/kg)	< 20.0
Moisture %*	< 0.1
Hexane (ppm)	< 500
Saponification Value*	180 – 195
Unsaponifiable Matter*	< 5.0
Refractive Index @ 20°C*	1.470 – 1.480
Specific Gravity 20/20°C*	0.920 – 0.930
Colour (Gardner)*	> 9.0

Tocopherol Content

α-tocopherol (mg/g)*	> 2.0
Total Tocopherol (mg/g)*	> 3.0

Fatty Acid Composition (major fatty acids)

C _n	FAME	% Composition Range
16:0	Palmitic	14 – 19
18:0	Stearic	< 2
18:1	Oleic	9 - 14
18:2	Linoleic	54 - 60
18:3α	Alpha Linoleic	6 - 10
20:1	Icosenoic	< 2
	Others	1 - 4

Contaminants

Contaminants within food grade oils are to meet legislation as determined by the EU. The oil for which this product specification applies is for non-food grade wheatgerm oil, and therefore contaminants within the oil may not meet legislative requirements.

Further Processing

All oil must be further refined before it can be used to ensure that it meets all EU legislative requirements regarding contaminants in the oil.

Storage & Transport

The oil has a best before date of 24 months in the original packaging. The oil should be stored in a cool, dry place, avoiding light and heat. The oil is packed under nitrogen. When removing oil from the drum it is advised that the drum is filled with nitrogen before closing tightly to prevent oxidation.

First Issue: 06/04/2016	Authored by: <i>J. Cronin</i> (Chemical Analyst)	Approved by: <i>C. Waltham</i> (Plant Manager)
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wheatgerm oil