

IDENTIFICATION

Product name:	QRILL™ Antarctic Phospholipid Oil
Product number:	43020046
Batch number:	A101783
Manufacturing date:	26/DEC/2020
Retest date:	26/DEC/2022
Composition:	Dark red colored oil extracted from Antarctic Krill, <i>Euphausia superba</i> . The product contains Omega-3 marine fatty acids and the natural antioxidant Astaxanthin.

ANALYTICAL SPECIFICATION

PARAMETER	METHOD	ACTUAL VALUE	LIMIT	UNIT
Appearance	Visual	Dark Red viscous oil	Dark red viscous oil	
Viscosity at 35°C	Rotational Viscometer	265	100 - 1000	mPaS

LIPID COMPOSITION

Total phospholipids		31P-NMR	44	≥ 30	g/100 g
Phosphatidylcholines	(1)	31P-NMR	39	≥ 18	g/100 g
Choline		31P-NMR	5	≥ 3	g/100 g

FATTY ACID PROFILE

Total omega-3 fatty acids	(2)	Internal method ANA-2014-07	27.8	≥ 17.0	g/100 g
- C 20:5 n-3 (EPA)	(2)	Internal method ANA-2014-07	12.9	≥ 8.0	g/100 g
- C 22:6 n-3 (DHA)	(2)	Internal method ANA-2014-07	7.9	≥ 5.0	g/100 g

STABILITY INDEX

Peroxide value		AOCS Cd 8b-90	2	≤ 10	mEq peroxide/kg
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ANTIOXIDANTS

Astaxanthin		FCC / USP-NF (UV)	392	≥ 100	µg/g
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WATER AND ETHANOL

Water		Karl Fischer	1	≤ 3	g/100 g
Water activity at 25°C		Moisture probe	0.1	≤ 0.7	
Ethanol content		Gas Chromatography	1	≤ 3	g/100 g

MICROBIOLOGY

Total plate count		AOAC 990.12	< 10	< 1000	cfu/g
Mould and yeast		FDA-BAM, 7th ed.	< 10	< 100	cfu/g
E. coli		USP-NF, 62	Negative	Negative	In 10 g sample
Coliform		AOAC 991.14	< 10	< 10	cfu/g
Salmonella		AOAC-RI100201 (PCR)	Negative	Negative	In 25 g sample

1 Phosphatidylcholines value quoted includes phosphatidylcholines and lysophosphatidylcholines.

2 Based on USP FCC8 Appendix VII (2013). Values expressed as Free Fatty Acids (FFA)

APPLICATION:

For use in animal nutrition.

PACKAGING:

Bulk product in sealed containers, with inert headspace.

HANDLING AND STORAGE:

Store below 25°C, dry and protected from direct sunlight. Due to high viscosity and possible stratification during storage, product should be agitated before use or sampling. Viscosity may be reduced by heating (up to 35°C) and /or gently stirring if necessary. Containers opened for sampling should be headspace flushed with inert gas prior to storage. Product can be stored at ambient temperature during transportation.

RETEST DATE:

2 years from date of manufacturing when stored in original unopened and sealed containers at recommended storage conditions.

COMMENTS:

Contains Crustacean Shellfish. Material is of animal origin – Antarctic krill (*Euphausia superba*).

Date: 18/MAY/2021
Approved electronically by:
Norman Lee
QA Manager

