

IDENTIFICATION

Product name: QRILL™ AstaOmega Oil (13/4)
 Product number: 43020041
 Batch number: A101733
 Manufacturing date: 26/MAR/2021
 Retest date: 26/MAR/2023
 Composition: Dark red colored oil extracted from Antarctic Krill, Euphausia superba.
 The product contains Omega-3 marine fatty acids and the natural antioxidant Astaxanthin .
 Additives: None
 Country of origin: Manufactured at Aker BioMarine Manufacturing LLC in Houston, Texas, US

ANALYTICAL SPECIFICATION

PARAMETER	METHOD	ACTUAL VALUE	LIMIT	UNIT
Appearance	Visual	Dark, red oil	Dark, red oil	
LIPID COMPOSITION				
Total phospholipids	31P-NMR	3	4 +/- 3	g/100 g
Free fatty acids	AOCS Cd 3d-63	1	Report value	g/100 g
FATTY ACID PROFILE				
Total omega-3 fatty acids	(1) ANA-2014-07	21	13 +/- 3	g/100 g
- C 20:5 n-3 (EPA)	(1) ANA-2014-07	5	6 +/- 3	g/100 g
- C 22:6 n-3 (DHA)	(1) ANA-2014-07	4	2 +/- 1	g/100 g
STABILITY INDEX				
Peroxide value	AOCS Cd 8-53	5	≤ 10	mEq peroxide/kg
ANTIOXIDANTS				
Astaxanthin	FCC / USP-NF (UV)	916	1100 +/- 350	mg/kg
WATER AND ETHANOL				
Water activity at 25°C	Moisture probe	0.2	≤ 0.7	
Water	Karl Fischer	< 1	≤ 2	%
Ethanol content	Gas Chromatography	0.4	≤ 2.0	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
Coliform	AOAC 991.14	< 10	< 10	cfu/g
E. coli	USP-NF, 62	Negative	Negative	In 10 g sample
Salmonella	AOAC-R1100201 (PCR)	Negative	Negative	In 25 g sample

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

APPLICATION:

Feed for use animal nutrition. Not for human consumption.

PACKAGING:

Bulk product in sealed containers, with inert headspace.

HANDLING AND STORAGE:

The product is best kept at temperatures <25°C during storage in its original packaging container.

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: 22/APR/2021

Approved electronically by:

Norman Lee

QA Manager

