



SUPPLEMENT CERTIFIED  
BY NRCI WATERFORD IRELAND

# Certificate of Analysis

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**Certificate number:** CoA-21-01-27

**Requested by:** Pharma Marine  
Terøy Industriområde 3  
6280 Sjøvik, Norway

**Date received:** 2021/10/18

**Storage temp:**  
**Storage hum:**  
**Date analysed:** 2021/10/19  
**Date reported:** 2021/10/20

**Product name:** Pure Arctic Oil GOLD Norwegian Brain Formula  
**Lot number:** 0051021  
**Distributor:** Eqology AS, Lysaker (Norway)

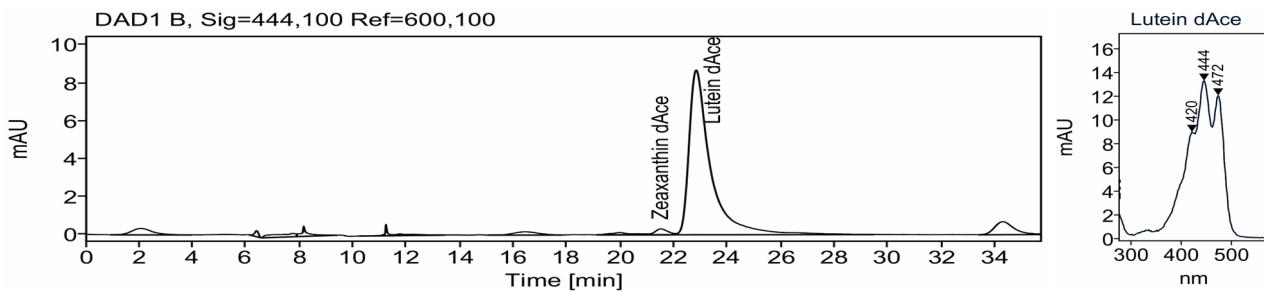
**Expiry date:** 2022/11  
**Serving size:** 1/Day  
**Formulation:** Oil

Analyte	Declared mg/9.2 g oil	Measured* mg/9.2 g oil ± U <sub>95%</sub>	Heterogeneity (RSD, %)	Confidence (%)	Method	Conformance
Lutein	12	21.15 ± 0.64	1.5	100	AM-HPLC-1807v2	Pass
Total carotenoids	12	21.15	-	-	AM-HPLC-1807v2	Pass

\* The reported expanded measurement uncertainty (U95%) is stated as the combined standard measurement uncertainty multiplied by the coverage factor k = 1.96 such that the coverage probability corresponds to approximately 95% (ILAC Guidelines for Measurement Uncertainty in Testing, ILAC-G17-01/2021).

Quality Control Sample	Micro Mic 5% Zeaxanthin Emulsion; Lot 90919; Analyte: Zeaxanthin diAce (50 mg/g)				
	Specifications#	Raw value	Value	Method	Result
Within-run Accuracy	85 - 115 %	Spec: 54.4 ± 2.1; HPLC: 54.4 ± 2.0	98.10%	AM-HPLC-1807v2	Conform
Within-run Precision	RSD < 15 %	-	0.10%	AM-HPLC-1807v2	Conform

# As defined by the Guideline On Bioanalytical Method Validation (EMA, European Medicines Agency) (EMA/CHMP/EWP/192217/2009 Rev. 1 Corr. 2\*\*), authored by the Committee for Medicinal Products for Human Use (CHMP) 21 July 2011. LQC, MQC and HQC: Low, Medium and High Quality Control sample.



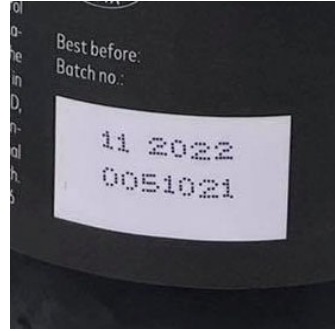


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### Product pictures



Nutritional Value	Per 10 ml (9,2 g)	Per 15 ml (13,8 g)
Energy	83 kcal/346 kJ	124 kcal/519 kJ
Fats	9,2 g	13,8 g
Saturated	900 mg	5565 mg
Monounsaturated	3710 mg	3855 mg
of which Omega-9	2570 mg	4978 mg
Polyunsaturated	3285 mg	3435 mg
of which Omega-3	2290 mg	855 mg
of which EPA	570 mg	2915 mg
of which DHA	1430 mg	3000 mg
Total EPA+DHA	2000 mg	18 mg
Lutein	12 mg	7,5 mg
Hydroxytyrosol	5 mg	375 mcg
Vitamin A	250 mcg	12,5 mcg
Vitamin D	8,3 mcg	



### Comments

### Conclusions

- This product complies with label claim and heterogeneity based on Supplement Certified criteria for Lutein diAce
- This product complies with label claim and heterogeneity based on Supplement Certified criteria for Total carotenoids

Conclusion: This product complies with Supplement Certified analysis criteria for label claim



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Supplement Certified criteria: Supplement Certified, performed by the Nutrition Research Centre Ireland, means that the supplement product analysed has undergone independent 3rd party analysis to confirm that each active ingredient (carotenoid and/or omega-3 fatty acid) present in the dietary supplement matches 100% of quantity label claim, excluding expanded uncertainty of 95% (U95%). Also, heterogeneity of each measurand must be below 10% (relative standard deviation, RSD).

Quality control criteria (Within-run accuracy): Closeness of the determined value obtained by the method to the nominal concentration of the analyte (expressed in percentage). Three quality control (QC) samples, representative of the external calibration line's low, medium, and high concentrations, are quantified by spectrophotometry (nominal concentration) and by HPLC (using the current external calibration line). Concentration of the analyte obtained by both techniques is averaged and shown (Raw value). The QC sample whose value is farthest from its nominal value is taken as the within-run accuracy (Value). This value must be within 15% of its nominal value to conform.

Quality control criteria (Within-run precision): Closeness of repeated individual measures of one of the analytes assessed. The QC sample representative of the high concentration of the external calibration line is analysed at the beginning, middle and end of the run. The resulting RSD (Value) must be below 15% to conform.

Disclaimers and Terms: The testing results in this certificate relate only to the samples described above. Unless otherwise stated, all results are expressed on an as received basis. This report shall not be altered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void.

**Analysis performed by: Tommy Power**

  
Tommy Power (Oct 20, 2021 12:47 GMT+1)

**Approved by: Dr Alfonso Prado-Cabrero**

  
Alfonso Prado-Cabrero (Oct 20, 2021 10:52 GMT+1)







# CoA-21-01-27 Pure Arctic Oil Gold 0051021 LC

Final Audit Report

2021-10-20

Created:	2021-10-20
By:	Alfonso Prado-Cabrero (aprado-cabrero@wit.ie)
Status:	Signed
Transaction ID:	CBJCHBCAABAAC4icRG_RA2ITuVpqZ5ISMlsJvSRoAnpa

## "CoA-21-01-27 Pure Arctic Oil Gold 0051021 LC" History

-  Document created by Alfonso Prado-Cabrero (aprado-cabrero@wit.ie)  
2021-10-20 - 9:51:36 AM GMT- IP address: 193.1.184.240
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