

<b>Analyses ordered by:</b>	<b>KLAS OIL EAD</b> distr. Oborishte, 26-28-30 Bacho Kiro Str., Platinum Business Centre 1, fl. 4, Sofia	<b>Date of sample receipt:</b>	16.03.2022
		<b>Date of analysis:</b>	16.03.2022 - 18.03.2022

<b>Type of sample:</b>	Fats, oils and derivatives. Refined sunflower oil Vitae d'Oro
<b>Sample description:</b>	1L
<b>The sample is identified by the client as:</b>	PROD. DATE: 14/03/2022/L13337 EXP. DATE: 14/03/2023

The sample is formed by the client.

<b>Package:</b>	Plastic	<b>Seal:</b>	No seal
<b>Package quality:</b>	Unimpaired	<b>Representative for:</b>	-
<b>Sampling report:</b>	-	<b>Sample temperature:</b>	-
<b>Sample weight:</b>	-		

The sample is destroyed during analysis.

## Physical and compositional tests

Parameter	Unit	Test Result, Uncertainty	Method of Analyses	Test Conditions
Cold test	--	Clear and limpid	AOAC 929.08:1929	-
Refractive index	--	1.4744 ± 0.0004	BDS EN ISO 6320:2017	At 20°C
Alkalinity (soaps)	mg/kg	< 0.1	BDS EN ISO 10539:2003	-
Unsaponifiable matter	%	0.99 ± 0.18	BDS EN ISO 3596:2004	-
Saponification value	mg KOH/g	189 ± 2	BDS EN ISO 3657:2020	-
Peroxide value	meq O2/kg	1.9 ± 0.1	BDS EN ISO 3960:2017	-
Iodine value	g/100g	122 ± 1	BDS EN ISO 3961:2018	-
Acidity (Free Fatty Acids)	%	0.03 ± 0.02	ISO 660:2020	As oleic acid
Moisture and volatile matter	%	0.03 ± 0.03	BDS EN ISO 662:2016	Drying oven - 103°C
Insoluble impurities	%	< 0.01	BDS EN ISO 663:2017	Solvent: n-hexane
Conventional mass per volume	g/mL	0.9174 ± 0.0009	BDS EN ISO 6883:2017	At 20°C, Jaulmes pycnometer
<b>Lovibond colour</b>			<b>ISO 15305:1998</b>	<b>5 1/4 inch cell</b>
Lovibond colour - Red	Lovibond unit	0.8 ± 0.1		-
Lovibond colour - Yellow	Lovibond unit	7.0 ± 0.7		-
Lovibond colour - Blue	Lovibond unit	0.0 ± 0.0		-
Lovibond colour - Neutral	Lovibond unit	0.0 ± 0.0		-

## Chemical tests

Parameter	Unit	Test Result, Uncertainty	Method of Analyses	Test Conditions
<b>Metals and non-metals</b>			<b>ISO 10540-1:2003</b>	-
Phosphorus	mg/kg	2 ± 0		-

Doc Number : VAR2200001175



# TEST REPORT

No. VAR22-0002596-0001 A / 18.03.2022

Laboratory of SGS Bulgaria Ltd.

ΦK 08 A1

Page 2 of 2

Laboratory of  
SGS Bulgaria Ltd.

Accredited by EA BAS in compliance with BDS EN ISO/IEC 17025:2018,  
Accreditation certificate: BAS reg. No 86 ЛИ, Dated: 08.03.2021, Valid until: 29.01.2025.  
EA BAS is a signatory to the EA MLA and ILAC MRA.  
The scope of accreditation is published on the official web site of SGS Bulgaria Ltd [www.sgs.bg](http://www.sgs.bg)

< Limit of quantification (LOQ)

\* Limit of detection (LOD)

Sum of analytes are reported as lower-bound values, unless stated different.

The reported uncertainties are expanded by a coverage factor of k=2 to a level of confidence of approximately 95 %.

Original 1

Notes:

1. This document is issued by the Company under its General Conditions of Service accessible at <https://www.sgs.com/en/terms-and-conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Laboratory's findings made at the time of testing only and within the limits of Client's instructions. SGS sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Warning: If hereinabove in this document it is stated that the sample to which the findings recorded herein, relate was drawn and/or provided by the Client or by a third party acting at the Client's direction then the reported findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample. SGS accepts no liability with regard to the origin or source from which the sample is said to be extracted.

2. The test report shall not be reproduced except in full without written approval of the laboratory.

**Results validated by**

Dimitar Krustev - Technical manager

VALIDATED, 18.03.2022

**Administrative signature of**

Veselka Pashova, Laboratory manager

This electronically generated test report has been checked and approved. It is also valid without handwritten signatures.

----- End of Report -----

Doc Number : VAR2200001175

Laboratory of SGS Bulgaria Ltd.

Bulgarian Ship Hydrodynamics Centre;  
1 William Froude Str.; 9003 Varna; Bulgaria

t:+359 (52) 35 80 90; f:+359 (52) 370 979  
E-mail: [VarnaLaboratory@sgs.com](mailto:VarnaLaboratory@sgs.com)

Member of SGS (Société Générale de Surveillance)

**Analyses ordered by:** **KLAS OIL EAD** **Date of sample receipt:** 16.03.2022  
distr. Oborishte, 26-28-30 Bacho Kiro Str., Platinum **Date of analysis:** 16.03.2022 - 18.03.2022  
Business Centre 1, fl. 4, Sofia

**Type of sample:** Fats, oils and derivatives. Refined sunflower oil Vitae d'Oro

**Sample description:** 1L

**The sample is identified by the client as:** PROD. DATE: 14/03/2022/L13337  
EXP. DATE: 14/03/2023

**The sample is formed by the client.**

**Package:** Plastic **Seal:** No seal

**Package quality:** Unimpaired **Representative for:** -

**Sampling report:** - **Sample temperature:** -

**Sample weight:** -

The sample is destroyed during analysis.

**Sensory tests**

Parameter	Unit	Test Result, Uncertainty	Method of Analyses	Test Conditions
<b>Organoleptic characteristics</b>			<b>BDS 1552:1986 (withdrawn, not revised)</b>	-
Colour	--	Light yellow		
Odour	--	Typical, free from foreign odour		
Taste	--	Typical, free from foreign taste		
Limpidity	--	Clear		
Appearance	--	Clear		

< Limit of quantification (LOQ)

\* Limit of detection (LOD)

Sum of analytes are reported as lower-bound values, unless stated different.

The reported uncertainties are expanded by a coverage factor of k=2 to a level of confidence of approximately 95 %.

Original 1

Notes:

1. This document is issued by the Company under its General Conditions of Service accessible at <https://www.sgs.com/en/terms-and-conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Laboratory's findings made at the time of testing only and within the limits of Client's instructions. SGS sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

**Warning:** If hereinabove in this document it is stated that the sample to which the findings recorded herein, relate was drawn and/or provided by the Client or by a third party acting at the Client's direction then the reported findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample. SGS accepts no liability with regard to the origin or source from which the sample is said to be extracted.

2. The test report shall not be reproduced except in full without written approval of the laboratory.

**Results validated by**

Dimitar Krustev - Technical manager

VALIDATED, 18.03.2022

**Administrative signature of**

Veselka Pashova, Laboratory manager

This electronically generated test report has been checked and approved. It is also valid without handwritten signatures.

Doc Number : VAR2200001175



# TEST REPORT

No. VAR22-0002596-0001 NA / 18.03.2022

ΦK 08 NA1

Page 2 of 2

Laboratory of  
SGS Bulgaria Ltd.

Laboratory of SGS Bulgaria Ltd.

----- End of Report -----

Doc Number : VAR2200001175

Laboratory of SGS Bulgaria Ltd.

Bulgarian Ship Hydrodynamics Centre;  
1 William Froude Str.; 9003 Varna; Bulgaria

t:+359 (52) 35 80 90; f:+359 (52) 370 979  
E-mail: VarnaLaboratory@sgs.com

Member of SGS (Société Générale de Surveillance)