# INSTITUTO DE NUTRICIÓN Y TECNOLOGÍA DE LOS ALIMENTOS - INTA

UNIVERSIDAD DE CHILE
Instituto de Nutrición y Tecnología de los Alimentos
Doctor Fernando Monckeberg Barros

Laboratorio de Análisis de Antioxidantes

antioxidantes@inta.uchile.cl - (56-2) 2978 1599 Av. El Líbano 5524, Macul, Santiago, Chile / <u>www.dinta.cl</u> – <u>www.inta.cl</u>

### **ANALYSIS REPORT NO. 62529-12-22**

Samples (According to Service Order)	ULTRAFINE GRAPE POMACE POWDER DEHYDRATED GRAPE POMACE GRAPE POMACE VITREOUS BIOMATERIAL
No. of samples:	3
Origin:	BIOGRAPES SPA
Address:	San Sebastián 2750, Of 902, Las Condes, Las Condes, Chile
Sent by	Santiago Elgueta
Sampled:	The client
Analysis requested:	Total Polyphenols ORAC
Sample reception date:	20/12/2022
Date of analysis execution:	27/12/2022
Sample packaging characteristics:	
Samples come in sealed and labeled transpar	rent plastic bags.
Label informed by the client on the sample:	Laboratory sample identification:
INTA 250 g POWDER	LA2-2156

# Physical characteristics sample:

INTA 250 g VITREOUS BIOMATERIAL

Sample LA2-2156

INTA 250 g POMACE

- Solid: Homogeneous ultrafine powder

- Color: RAL 2013

Sample LA2-2157

- Solid: Heterogeneous seeds and skins mixture

- Color: RAL 3007

LA2-2157

LA2-2158

### INSTITUTO DE NUTRICIÓN Y TECNOLOGÍA DE LOS ALIMENTOS - INTA



Laboratorio de Análisis de Antioxidantes

antioxidantes@inta.uchile.cl - (56-2) 2978 1599 Av. El Líbano 5524, Macul, Santiago, Chile / www.dinta.cl - www.inta.cl

Sample LA2-2158

- Solid: Vitreous biomaterial

- Color: RAL 3007

Color Defined according to: <a href="https://cartaral.es/pages/colores-ral">https://cartaral.es/pages/colores-ral</a>

#### Results:

Sample	Total Polyphenols (mg GAE/100 g)	<b>ORAC</b> (μmol ET/100 g)
LA2-2156	3.925,8 ± 5,6	38,990.5± 18.6
LA2-2157	1.015,7 ± 2,6	15,235.8± 10.6
LA2-2158	2,693.2± 4.2	26,128.7± 15.6

GAE = Gallic Acid Equivalent ET = Trolox® Equivalent

#### Methodologies used:

Extraction/Dissolution Medium: Acetone/Ultra-pure double distilled water (70/30 V/V).

<u>Total Polyphenols</u>. They were assayed as described in the internal procedure of the Antioxidant Analysis Laboratory (MME-Pro-001), which is based on the method of Wu *et al.* (J. Agric. Food Chem. 52: 4026-4037; 2004). The technique used not only responds to the content of polyphenols in the sample, whether of endogenous or added origin, but also to other compounds capable of reducing the Folin-Ciocalteu reagent, such as reducing sugars, thiols, ascorbic acid, certain peptides and amino acids.

<u>ORAC</u> (Oxygen Radical Absorbance Capacity) <u>assay</u>. The ORAC antioxidant activity was assayed as described in the internal procedure of the Antioxidant Analysis Laboratory (MME-Pro-002), which is based on the method of Wu et al (J. Agric. Food Chem. 52: 4026-4037; 2004).

These methods do not distinguish between endogenous antioxidant compounds (which are a natural part of the food) and exogenous ones (those added during processing, and which may or may not have been intended for food preservation and/or nutritional enhancement).

The sample was analyzed in independent duplicates, each in three replicates.

### INSTITUTO DE NUTRICIÓN Y TECNOLOGÍA DE LOS ALIMENTOS - INTA



Laboratorio de Análisis de Antioxidantes

antioxidantes@inta.uchile.cl - (56-2) 2978 1599 Av. El Líbano 5524, Macul, Santiago, Chile / www.dinta.cl - www.inta.cl

For solid samples, these will be discarded after 30 days from the date of receipt in the laboratory. For liquid and other perishable samples, the storage time for counter samples will be a maximum of 15 days from the date of receipt of the samples in the laboratory.

If a repeat analysis is required or additional analyses are requested, a new service order must be issued. Only the technical use of these results is authorized and in no case public, which only apply to the sample(s) sent by the client (as labeled) and analyzed by INTA. Any other use must be previously agreed with INTA".

Santiago, December 29, 2022

Prof. Hernán Speisky; Ph.D

Director

Laboratorio de Análisis de Antioxidantes

INTA, Universidad de Chile,

Email: antioxidantes@inta.uchile.cl

Le invitamos a que visite nuestro sitio web www.portalantioxidantes.com