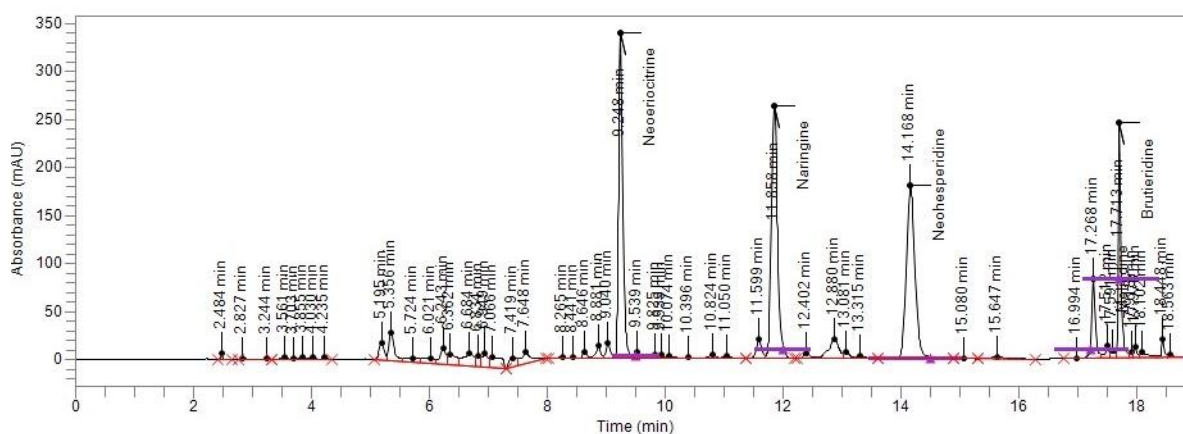


SAMPLE REPORT

Acquisition Date/Time 08-Apr-21 09:41:18
 Acquisition Method Flavonoids cal. on Naringin
 Chromera Version 4.2.0.6415
 Dilution Factor 300
 Report Date/Time 08-Apr-21 10:01:28
 Sample Name BPE Lot 0403-21
 Vial Number 93



Peak #	Time	Component Name	Area	Height	Final Amount	Units
47	17.713	Brutieridine	656,827.3	246,131.4	56,496.8320	µg/g
44	17.268	Melitidine	349,250.1	83,830.6	27,950.9345	µg/g
35	11.858	Naringine	1,874,484.3	263,414.2	138,945.5648	µg/g
26	9.248	Neoeriocitrine	1,618,264.9	340,179.9	131,942.1912	µg/g
40	14.168	Neohesperidine	1,838,350.9	180,787.0	134,617.2130	µg/g
Total			6,337,177.4		489,952.7356	

Approved:

Signature: _____ Name: _____ Date: _____

Bergamot Polyphenolic Extract (BPE)

SPECIFICATION SHEET

ID Code	BRGESTPG	
Trade name	BERGAMOT POLYPHENOLIC EXTRACT (BPE)	
DESCRIPTION	SPECIFICATIONS	
Botanical Source	Citrus Bergamia Risso et Poit.	
Family	Rutaceae	
Synonyms	Citrus aurantium var. bergamia	
Country of Origin	Calabria, Italy	
Part Used	Fruit Juice	
Shelf Life	4 years, if correctly stored	
ORGANOLEPTIC CHARACTERISTICS	SPECIFICATIONS	
Colour	Yellow Powder	visual (CQ-MO-148)
Odour	Aromatic	visual (CQ-MO-148)
Flavour	Characteristic of bergamot	sensory (CQ-MO-148)
CHEMICAL CHARACTERISTICS	SPECIFICATIONS	METHOD
pH	3.0 – 4.0	IM (0.5% in water at 25°C)
Average Mesh Size	Pass 60 mesh	Sieve: (CQ-MO-023)
Bulk Density	40 - 60 g/100mL	PT CHIM 65 rev 0 2011
Moisture Content	< 8.0%	ISTISAN 96/34, pag 7
Solubility in 40°C H ₂ O	Good	visual: (CQ-MO-148)
Solubility in 50% H ₂ O + EtOH	Good	visual: (CQ-MO-148)
Organic Solvent Residue	Complies with Dir. 2009/32/CE	GC: (CQ-MO-168)
Pesticides Residue	Complies with Reg. UE 839/2008	PT CHIM 69rev 02 011
Tot. active ingredient strength (Neoeriocitrin, Naringin, Neohesperidin, Melitidin, Brutieridin)	> 47.0 %	HPLC
SINGLE COMPONENT MINIMUM TRESHOLD CONCENTRATION		
Neoeriocitrin	9.0 %	
Naringin	11.0 %	
Neohesperidin	11.0 %	
Melitidin	1.0 %	
Brutieridin	2.0 %	
HEAVY METALS	UNIT	RANGE
Arsenic	mg/kg	<1.0
Lead	mg/kg	<0.5
Cadmium	mg/kg	<0.5
Mercury	mg/kg	<0.3
MICROBIOLOGICAL EVALUATION		
Aerobic Plate Count	<1,000 CFU/g	ISO 4833-1:2013
Yeast and Mold Count	<100 CFU/g	ISO 21527-1:2008
E. Coli	Negative	ISO 16694-2:2001
Coliform	Negative	ISO 4832:2006
Salmonella	Negative	UNI EN ISO 6579:2000
Staphylococcus Aureus	Negative	UNI EN ISO 6888-2:2004
Streptococci	Negative	PT BAT26 rev0 02012
PRODUCT TREATMENT		
Drying Method	Spray dry	

Herbal &Antioxidant Derivatives S.r.l. (H&AD S.r.l.)

Headquarters: Località Chiusi - 89032 BIANCO (RC), ITALY

Tel. +39 0964 913405 E-mail: info@head-sa.com Website: <http://www.head-sa.com/>

CF/PI- 02543180802

Bergamot Polyphenolic Extract (BPE)

NUTRITIONAL FACTS

PRODUCT NAME:	BPE
IDENTIFICATION CODE:	BRGESTPG
NUTRIENTS	AMOUNT per 100g
Calorific Value (kcal)	300 - 450
Fat (%)	< 1.0
Ash (%)	< 7.0
Total Carbohydrates (%)	> 80.0
Protein (%)	< 2.5
Water (%)	< 8.0

RECOMMENDED STORAGE CONDITIONS:

Store in a fresh and dry place, repaired from light and humidity sources.

BEST BEFORE:

48 months under the previously mentioned conditions and in its original packaging.

PACKAGING:

20 kg fiber drums or 10 kg Aluminium bags.

Giuseppe Trunfio

H&ad srl analytical chemistry & processes
E-mail : g.trunfio@head-sa.com