

## DECLARATION OF ALLERGENS

## 1. MIXTURE

## 1.1 Product identifier

product trade name	Bergamot Essential Oil Italy - PA-100PC
relevant identified uses	odour agent / flavouring agent
origin & production process	obtained from Italian citrus essential oils & citrus by-products (mainly from <i>Citrus bergamia</i> , RISSO et POITEAU) & completed with natural identical substances
chemical identification & grade	45% Natural Complex Substance / 55% Natural Identical Substances
EU chemical name	for 45% Bergamot, ext. / for 55% confidential
EC number	for 45% 289-612-9 / for 55% confidential
CAS number (EC inventory)	for 45% 89957-91-5 / for 55% confidential
RIFM number	various
FDA number	various
CE number	various
FEMA number	various

## 2. PHYSICAL/CHEMICAL PROPERTIES

## 2.1 Organoleptics characteristics

appearance & color	liquid - yellow to greenish
odor	typical bergamot note

## 2.2 Physical &amp; chemical data

analysis	ranges	instruments	
relative density $d_4^{20}$	0.8640 ÷ 0.8840	ANTON PAAR - DMA 4500	
optical rotation $\alpha_D^{20}$	+20.00° ÷ +40.00°	Optical Activity - POLAAR 20	
refractive index $n_D^{20}$	1.4600 ÷ 1.4720	ANTON PAAR - RXA 170	
peroxides <sup>(1)</sup>	≤20 mmol/l	CDR - FoodLab	
flash point	~57 °C (135 °F)	GRABNER - Miniflash FLP	
solubility	alcohol - other oils	-	

## 2.3 Key peaks

common name	ranges	instruments	restricted / regulated components <sup>(1)</sup>
pinenes ( $\alpha$ + $\beta$ )	≤15.00%	GC - internal method	-
limonene	35.00% ÷ 55.00%	GC - internal method	IFRA 47 <sup>th</sup> - [Reg. (EC) 1223/2009 - ANNEX III]
$\gamma$ -terpinene	2.00% ÷ 7.00%	GC - internal method	-
linalool	8.00% ÷ 18.00%	GC - internal method	IFRA 47 <sup>th</sup> - [Reg. (EC) 1223/2009 - ANNEX III]
citronellol	≤0.10%	GC - internal method	IFRA 47 <sup>th</sup> - [Reg. (EC) 1223/2009 - ANNEX III]
citral	≤0.90%	GC - internal method	IFRA 47 <sup>th</sup> - [Reg. (EC) 1223/2009 - ANNEX III]
linalyl acetate	10.00% ÷ 20.00%	GC - internal method	-
bergaptene	≤200 ppm	HPLC - internal method	IFRA 47 <sup>th</sup> - [Reg. (EC) 1223/2009 - ANNEX II]
furocoumarins	≤2500 ppm	HPLC - internal method	[Reg. (EC) 1223/2009 - ANNEX II]

3. IFRA 47<sup>th</sup>

## 3.1 Involved components [ORA categories (1-11)]

common name	%	status
limonene	≤55.00	specification
linalool	≤18.00	specification
citronellol	≤0.10	restricted
citral	≤0.90	restricted

## 3.2 Involved components [SKIN categories]

common name	%	status
bergaptene	≤0.0200	restricted

## 4. COSMETICS REGULATION (EC) 1223/2009

## 4.1 Involved components [all annexes]

common name	%	type	annex
limonene	≤55.00	allergen	III
linalool	≤18.00	allergen	III
citronellol	≤0.10	allergen	III
citral	≤0.90	allergen	III
furocoumarins	≤0.2500	psoralens	II

## 5. OTHER CERTIFICATIONS

## 5.1 Statements

Food	all ingredients of this product are FEMA (GRAS)
Food Allergens Free	this product does not contain any food allergens
GMO Free	this product does not contain any GMO nor GMO-derived product

## 6. STORAGE / SHELF LIFE

## 6.1 Precautions for safe storage

container & conditions	to be stored in stainless steel drums, preferably under inert atmosphere (nitrogen) with minimum head space, protected from day-light in a dry, aerated place, away from any heat source and ignition source
temperature	from 5 °C and 20 °C
shelf life	365 days, as per recommended storage conditions