

CERTIFICATE OF ANALYSIS

PRODUCT IDENTIFICATION		COMPANY IDENTIFICATION	
PRODUCT NAME:	Chamomile, noble	COMPANY:	ZAYAT AROMA INC.
BOTANICAL NAME:	Chamaemelum nobile (Anthemis nobilis)	ADDRESS:	1339 SHEFFORD, BROMONT (QC) J2L 1C9, CANADA
SYNONYM(S):	Roman chamomile	TELEPHONE:	1.855.534.1671
		FAX:	1.855.318.6124
		WEB:	WWW.ZAYATAROMA.COM
		E-MAIL:	INFO@ZAYATAROMA.COM
INCI NAME:	Anthemis nobilis flower oil		
CAS TSCA:	8015-92-7	HS CODE:	3301.29
CAS EINECS:	84649-86-5	EINECS:	283-467-5
FEMA:	2275	COE:	48n
COUNTRY OF ORIGIN:	United Kingdom	FDA CODE:	182.2
PRODUCTION TYPE:	Conventional		
PRODUCTION METHOD:	Distillation complète à la vapeur d'eau		
PART DISTILLED:	Flowers		
LOT NUMBER:	EAC242662AN35618I		
PRODUCTION DATE:	April 2018		
EXPIRATION DATE:	April 2020		

PROPERTIES	SPECIFICATIONS	RESULTS
APPEARANCE	<i>Colorless to yellow and perhaps even bluish liquid</i>	<i>Complies</i>
ODOR	<i>Fruity characteristic chamomille odor.</i>	<i>Complies</i>
SOLUBILITY	<i>Soluble in alcohol and oils. Insoluble in water.</i>	<i>Complies</i>
SPECIFIC GRAVITY:	<i>0.892 - 0.920 @ 20°C</i>	<i>0.908</i>
OPTICAL ROTATION:	<i>-2.0 - +3.0 @ 20°C</i>	<i>-0.5</i>
REFRACTIVE INDEX:	<i>1.438 - 1.447 @ 20°C</i>	<i>1.446</i>
PEROXYDE VALUE:	<i><= 15 mEq O2/KG</i>	<i>Complies</i>

DISCLAIMER

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Chamomile, noble
Chamaemelum nobile (Anthemis nobilis)

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COMPONENTS	% TOTAL: 99.96
ACETONE	0.02
1-OCTENE	0.03
FURAN,2-METHYL-	0.01
METHACROLEIN	0.03
FURAN,3-METHYL-	0.01
2-BUTANONE	0.01
BUTANAL, 2-METHYL	0.03
ISOVALERALDEHYDE	0.04
2-PENTANONE	0.04
1 -NONENE	0.03
FURAN, 2 -ETHYL	0.02
3 -PENTEN - 2 -ONE	0.02
METHYL 2 -METHYLBUTYRATE	0.02
ISOBUTYL ACETATE	0.06
alpha -PINENE	6.64
ETHYL METHACRYLATE	0.01
ETHYL 2 -METHYLBUTYRATE	0.23
CAMPHENE	0.38
ISOBUTYL PROPIONATE	0.02
HEXANAL	0.10
ISOBUTYL ISOBUTYRATE	2.62
2 -BUTEN - 1 -OL ACETATE	0.04
beta -PINENE	0.65
METHYL TIGLATE	0.05
ISOAMYL ACETATE	0.17
SABINENE	0.05
PINADIENE	0.04
PROPYL METHACRYLATE	0.14
PROPYL, 2 -METHYLBUTYRATE	0.12
BUTYL ISOBUTYRATE	0.05
PROPYL ISOVALERATE	0.01
ETHYL ANGELATE	0.09
beta-MYRCENE	1.94
ISOBUTYL METHACRYLATE	1.15
ISOBUTYL 2-METHYLBUTYRATE	1.35
ALLYL ETHYLBUTYRATE	0.07
ISOBUTYL ISOVALERATE	0.19
AMYL ISOBUTYRATE	0.48
ISOAMYL ISOBUTYRATE	2.74
ISOAMYL ALCOHOL	0.07
LIMONENE	0.20
1,8-CINEOLE	0.06
BUTYL METHACRYLATE	0.08
FURAN, 2-AMYL	0.03
BUTYL 2-METHYLBUTYRATE	0.02
3-METHYLPENTYL ACETATE	0.14
PRENYL ACETATE	0.80
ISOPROPYL ANGELATE	1.05
ALLYL METHACRYLATE	2.16
DIMETHYL HEPTANONE ISOMER Mw=142	0.44
p-CYMENE	0.16
2?METHYLBUTYL METHACRYLATE	2.92
AMYL VALERATE	0.23
2-METHYLBUTYL 2-METHYLBUTYRATE	1.12
ISOBUTYL ANGELATE & ISOAMYL METHACRYLATE	9.31
AMYL ISOVALERATE	0.12
ISOBUTYL CAPROATE	0.21
ALKYL ANGELATE	0.11

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HEXYL ISOBUTYRATE	1.07
PRENYL BUTYRATE	1.90
PROPYL TIGLATE	0.03
1 -PENTANOL 4 -METHYL	0.08
BUTYL ANGELATE	0.43
METHACRYLIC ESTER	0.08
ALIPHATIC ESTER	0.07
ISOBUTYL TIGLATE	0.10
METHALLYL ANGELATE	11.10
ALIPHATIC ESTER	0.01
3 -HEXEN - 1 -OL	0.06
METHYL PENTYL ESTER	1.94
METHACRYLIC ESTER	0.36
2 -METHYLBUTYL ANGELATE	4.42
ISOAMYL ANGELATE	8.42
METHACRYLIC ESTER	1.74
HEPTYL 2 -METHYLPROPIONATE	0.07
METHACRYLIC ESTER	0.03
ALIPHATIC ESTER	0.04
ALKYL ANGELATE	0.12
ALIPHATIC ESTER	0.02
ALIPHATIC KETONE	0.18
ARTEMISIA KETONE	0.48
ALIPHATIC ESTER	0.07
METHALLYL ANGELATE ISOMER	0.15
METHACRYLIC ESTER	0.03
SESQUITERPENE	0.07
alpha -COPAENE	0.07
ALIPHATIC ESTER	0.04
METHYLAMYL ANGELATE C11	7.89
alpha -PINOCAMPHONE	0.02
METHYLPENTYL METHACRYLATE	2.88
ISOPINOCAMPHONE	0.26
ALIPHATIC ESTER	0.05
HEXYL ANGELATE	0.03
LINALOOL	0.01
PINOCARVONE	4.66
ALIPHATIC ESTER	0.10
ALIPHATIC ESTER	0.06
epsilon -CADINENE	0.01
BORNYL ACETATE	0.01
ALKYL ANGELATE	0.06
Cis - 3 -HEXENYL ANGELATE	0.06
beta -ELEMENE	0.05
CAMPHENE HYDRATE	0.09
beta -CARYOPHYLLENE	0.12
METHACRYLIC ESTER	0.04
2 -UNDECANONE	0.02
MYRTENAL	0.72
Cis -PINOCARVYL ACETATE	0.02
Trans -PINOCARVEOL	5.24
alpha -HUMULENE	0.01
ALKYL ESTER	0.10
METHYL ESTER	0.02
Trans -VERBENOL	0.11
ALKYL ESTER	0.11
gamma -MUUROLENE	0.02
BORNEOL	0.13
VERBENONE	0.02
GERMACRENE D	2.07
beta -SELINENE	0.05
BENZYL ACETATE	0.04
alpha-MUUROLENE	0.08
BICYCLOGERMACRENE	0.07
EUDESMA-3,5,11-TRIENE	0.05
alpha-FARNESENE	0.28

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<i>delta</i> -CADINENE	0.05
ALIPHATIC ESTER	0.03
PHENYLMETHYL ISOBUTYRATE	0.14
ISOBUTYL-3-HYDROXY-2-METHYLENEBUTYRATE	0.08
MYRTENOL	0.37
2,4-DECADIENAL	0.01
<i>beta</i> -DAMASCENONE	0.01
2-PHENYLETHYL ACETATE	0.02
<i>Trans</i> -CARVEOL	0.03
HEXENYLIC ESTER	0.03
MYRTENYL ACETATE	0.04
2-HYDROXY-2-METHYLBUT-3-ENYL ANGELATE	0.70
ISOPENTYL-3-HYDROXY-2-METHYLENEBUTYRATE	0.10
AROMATIC COMPOUND	0.03
MYRTENYL ESTER	0.02
NERYL METHYLBUTYRATE	0.01
ALIPHATIC ESTER	0.06
BENZYL TIGLATE	0.05
ALIPHATIC DIONE	0.08
COMPOUND	0.03
ALIPHATIC KETONE	0.08
PENTADECANONE TRIMETHYL	0.09
HUMULANE-1,6-DIEN-3-OL	0.03
LEVOJUNEOL	0.12
PHYTOL	0.04
DIBUTYL PHTALATE	0.04