

CERTIFICATE OF ANALYSIS

PRODUCT NAME: PETITGRAIN, ESSENTIAL OIL ORGANIC

LOT NUMBER: 4367107

PRODUCT INCI: CITRUS AURANTIUM AMARA (BITTER ORANGE) LEAF OIL

PRODUCT CODE: OCPETI

CAS NUMBER: 689-04-1 / 72968-50-4

EINECS NUMBER: 277-143-2
BEST BEFORE END: July 2022

ANALYTICAL DETAILS	Range	RESULTS
Appearance	LIQUID	-
Colour	Pale Yellow - Brown	-
Odour	Characteristic	-
SPECIFIC GRAVITY @ 20°C	0.882 - 0.893	0.8909
Refractive Index @ 20°C	1.450 – 1.465	1.4598
OPTICAL ROTATION (°C)	-7.0 TO +1.0	- 3.98

STORAGE CONDITIONS

STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT



Allergen Declaration:

PRODUCT NAME:	Petitgrain, Essential Oil Organic			
INCI:	Citrus Aurantium Amara (Bitter Orange) Leaf			
	COSMETIC ALLERGENS			
The Foi	llowing is from the 7th amendment of the cosmetic directive of the European Union Annex iii.			
nnex Illa Reference:		CAS NUMBER:	TOTAL ALLERGEN INCLUSION (%):	
67	AMYL CINNAMAL	122-40-7	0.00	
68	BENZYL ALCOHOL	100-51-6	0.00	
69	CINNAMYL ALCOHOL	104-54-1	0.00	
70	CITRAL	5392-40-5	1.00	
71	EUGENOL	97-53-0	0.00	
72	HYDROXY-CITRONELLAL	107-75-5	0.00	
73	ISOEUGENOL	97-54-1	0.00	
74	AMYLCIN-NAMYL ALCOHOL	101-85-9	0.00	
75	BENZYL SALICYLATE	118-58-1	0.00	
76	CINNAMAL	104-55-2	0.00	
77	COUMARIN	91-64-5	0.00	
78	GERANIOL	106-24-1	4.00	
79	HYDROXY- METHYLPENTYLCYCLOHEXENECARBOXALDEHYDE	31906-04-4	0.00	
80	ANISE ALCOHOL	105-13-5	0.00	
81	BENZYL CINNAMATE	103-41-3	0.00	
82	FARNESOL	4602-84-0	0.00	
83	BUTYLPHENYL METHYLPROPIONAL	80-54-6	0.00	
84	LINALOOL	78-70-6	30.00	
85	BENZYL BENZOATE	120-51-4	0.00	
86	CITRONELLOL	106-22-9	0.00	
87	HEXYL CINNAM-ALDEHYDE	101-86-0	0.00	
88	LIMONENE	5989-27-5	1.50	
89	METHYL HEPTIN CARBONATE	111-12-6	0.00	
90	ALPHA-ISOMETHYL IONONE	127-51-5	0.00	
91	EVERNIA PRUNASTRI EXTRACT	90028-68-5	0.00	
92	EVERNIA FROMASTRI EXTRACT	90028-67-4	0.00	
52	EVERTUA FORFORACEA EXTRACT	50028-07-4	0.00	
	FOOD ALLERGENS			
e following is from the commision	n directive 2007/68/EC of 27th November 2007 amending Annex Illa to Directive 200/13/EC of the European Parli	ament & Council with regards to specific food ing	predients.	
nex Illa Reference:		PRESENT IN PRODUCT:	CONTAMINATION PRESENCE:	FACTORY PRESENCE:
1	CEREALS (CONTAINING GLUTEN)	NO	NO	YES
2	CRUSTACEANS	NO	NO	NO
3	EGGS	NO	NO	NO
4	FISH	NO	NO	NO
5	PEANUTS	NO	NO	YES
6	SOYA	NO	NO	YES
7	MILK	NO	NO	YES
8	NUTS	NO	NO	YES
9	CELERY & CELERIAC	NO	NO	NO
10	MUSTARD	NO	NO	YES
11	SESAME	NO	NO	YES
12	SULPHUR DIOXIDE & SULPHITES	NO	NO NO	NO
		NO	NO NO	NO
13	LUPIN			



GMO Statement

PRODUCT NAME: Petitgrain Organic

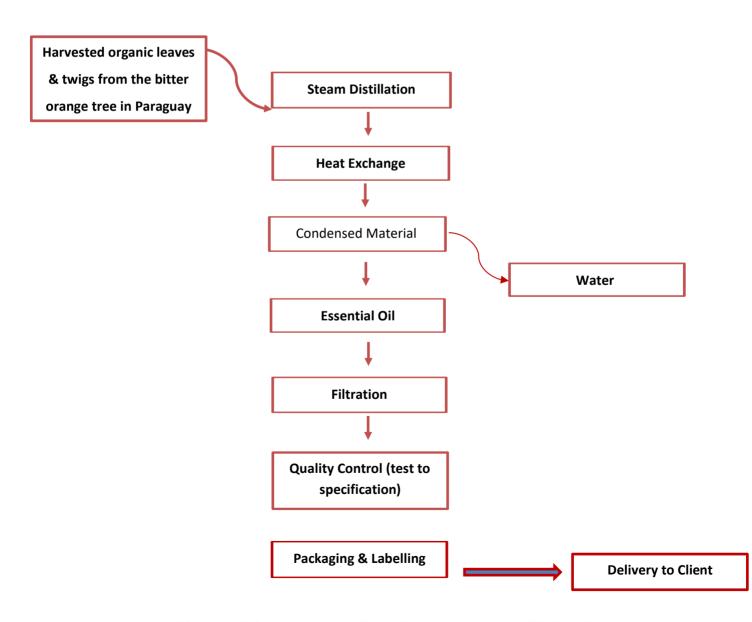
MADAR Corporation Limited can confirm that the above listed product is GMO Free.

06/03/2019



Composition Statement & Manufacturing Flow Chart Petitgrain, Essential Oil Organic

INCI Name	% Inclusion	CAS Number
Citrus Aurantium Amara (Bitter Orange) Leaf	100	689-04-1 / 72968-50-4





IFRA STATEMENT
PRODUCT NAME: PETITGRAIN, ESSENTIAL OIL ORGANIC
Product Inci: Citrus Aurantium Amara (Bitter Orange) Leaf
PRODUCT CODE: OCPETI
CAS NUMBER: 689-04-1 / 72968-50-4
EINECS NUMBER: 277-143-2
MANUFACTURING METHOD: STEAM DISTILLED
Shelf Life / Best Before: 24 months

MADAR CERTIFY THAT THE ABOVE NAMED MATERIAL CONFORMS TO THE IFRA 48 CODE OF PRACTICE AND CONTAINS THE FOLLOWING RESTRICTED COMPONENTS THAT ARE LISTED IN THE 48^{TH} AMENDMENT OF THE IFRA CODE OF PRACTICE:

Restricted Component	Cas No:	% Level in Product	IFRA Standard
Linalool	78-70-6	15.0 – 30.0	Specification Std
Limonene	5989-27-5	< 2.5	Specification Std
Geraniol	106-24-1	< 4.5	Restriction Stds (QRA cat.)
Citral	5392-40-5	< 1.0	Restriction Stds (QRA cat.)

IFRA Classes	% Maximum Use Level
Class 1	4.0
Class 2	5.0
Class 3A	20.0
Class 3B	20.0
Class 3C	20.0
Class 3D	20.0
Class 4A	60.0
Class 4B	60.0
Class 4C	60.0
Class 4D	60.0
Class 5	30.0



Class 6	Not Restricted.
Class 7A	10.0
Class 7B	10.0
Class 8A	44.44
Class 8B	44.44
Class 9A	Not Restricted.
Class 9B	Not Restricted.
Class 9C	Not Restricted.
Class 10A	55.56
Class 10B	55.56
Class 11	Not Restricted.

Finished product types	IFRA class
Toys; Lip Products of all types (solid and liquid lipsticks, balms, clear or colored etc)	Class 1
Deodorant and Antiperspirant products of all types (spray, stick, roll-on, under-arm and body etc)	Class 2
Hydroalcoholic products applied to recently shaved skin (EdT range)	Class 3.A
Hydroalcoholic products applied to recently shaved skin (fine fragrance range)	Class 3.B
Eye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc) including eye cream. Men's Facial Creams and Balms	Class 3.C
Tampons.	Class 3.D
Hydroalcoholic Products applied to unshaved skin (EdT range). Ingredients of Perfume Kits. Scent Strips for Hydroalcoholic Products, "scratch and sniff", other paper products not mentioned elsewhere for which skin exposure is only incidental (e.g. spectacle cleaning tissues).	Class 4.A
Hydroalcoholic Products applied to unshaved skin (Fine Fragrance range).	Class 4.B
Hair Styling Aids and Hair Sprays of all types (pumps, aerosol sprays, etc); Hair Deodorant. Body Creams, Oils, Lotions of all types (including baby creams, lotions, oils). Fragrance Compounds for Cosmetic Kits, Foot Care Products	Class 4.C
Fragrancing Cream	Class 4.D
Women's Facial Creams/Facial Make-up (excluding eye cream); Facial Masks; Hand Cream Wipes or refreshing tissues for Face, Neck, Hands, Body.	Class 5
Mouthwash, Toothpaste.	Class 6
Intimate Wipes; Baby Wipes.	Class 7 A
Insect Repellent (intended to be applied to the skin).	Class 7 B
Make-up Removers of all types (not including face cleansers). Hair Styling Aids Non-Spray of all types (mousse, gels, leave-in conditioners etc). Nail Care. All Powders & Talcs (including baby powders and talcs).	Class 8
Liquid Soap, Bar Soap (toilet soap); Depilatory; Conditioner (rinse-off), Shampoos of all types (including baby shampoos). Face Cleansers of all types (washes, gels, scrubs, etc). Shaving Creams of all types (stick, gels, foams, etc). Body Washes of all types (including baby washes). Shower Gels of all types; Bath Gels, Foams, Mousses, Salts, Oils and other products added to bathwater	Class 9.A
Feminine hygiene pads / liners.	Class 9.B
'Other' Aerosols (including air fresheners sprays but not including deodorant/antiperspirants, hair styling aids spray).	Class 9.C



Hand wash/Machine wash Laundry Detergents of all types (liquid, powder, tablet, etc) including Laundry Bleaches. Other Household Cleaning Products (fabric cleaners, soft surface cleaners, carpet cleaners etc). Dry Cleaning Kits. Fabric Softeners of all types including fabric softener sheets. Hand Dishwashing Detergent. Hard Surface Cleaners of all types (bathroom and kitchen cleansers, furniture polish etc). Shampoos for pets	Class 10.A
Diapers. Toilet seat wipes.	Class 10.B
All non-skin contact, including: Air Fresheners and fragrancing of all types (excluding aerosol products): plug-ins, solid substrate, membrane delivery; Toilet blocks; Joss Sticks, Incense; Insecticides (mosquito coil, paper, electrical, etcexcluding aerosols); Plastic articles (excluding toys); Candles; Fuels; Paints; Floor wax; Liquid refills for air fresheners (cartridge system)	Class 11.A
All incidental skin contact, including: Machine Dish wash Detergents and Deodorizers. Machine only Laundry Detergents (e.g. liquitabs). Deodorizers/Maskers (e.g. fabric drying machine deodorizers, carpet powder). Pot pourri, fragrancing sachets, liquid refills for air fresheners (non-cartridge systems), etc Shoe polishes; Cat Litter; Animal Sprays (excluding aerosols); Treated Textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorizers for textiles or fabrics, tights with moisturizers); Odored Distilled Water (that can be added to steam irons).	Class 11.B

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with MADAR regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. The information is not to be disclosed to others, reproduced or transmitted in whole or in part without permission from MADAR. It is the responsibility of the client to ensure the safety of the final product containing this ingredient. Please carry out additional testing if necessary.



Material Safety Data Sheet

EU Regulation: 1907/2006

SECTION 1: IDENTIFICATION OF	THE SUBSTANCE	/MIXTURE A	AND OF THE COMPANY/	UNDERTAKING	
1.1 PRODUCT IDENTIFICATION					
PRODUCT NAME	PETITGRAIN, ESSENTIA	L ORGANIC			
BIOLOGICAL DEFINITION		THE VOLATILE OIL OBTAINED BY STEAM DISTILLATION OF THE BRANCHES, TWIGS AND LEAVES OF AN ACCLIMATISED VARIETY OF THE BITTER ORANGE TREE CITRUS AURANTIUM L. SUBSP. AURANTIUM			OF AN ACCLIMATISED VARIETY OF THE BITTER
INCI NAME	CITRUS AURANTIUM A	CITRUS AURANTIUM AMARA (BITTER ORANGE) LEAF			
SYNONYMS & TRADE NAMES	-	-			
INTERNAL PRODUCT CODE	ОСРЕТІ				
CAS-No	689-04-1 / 72968-50-4	EC No.	277-143-2	EINECS No.	277-143-2
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
COMPANY ADDRESS	MADAR Corporation Limited 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA. United Kingdom				
EMAIL	sales@madarcorporation.co.uk				
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
EMERGENCY CONTACTS	01425 655555 during office hours				



SECTION 2: HAZARDS IDENTIFICATION		
2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE	THE FULL TEXT FOR ALL HAZARD STATEMENTS IS DISPLAYED IN SECTION 16.	
CLASSIFICATION (67/548/EEC)	THE FULL TEXT FOR ALL R-PHRASES AND HAZARD STATEMENTS ARE DISPLAYED IN SECTION 16.	
CLASSIFICATION (EU1272/2008)	PHYSICAL AND CHEMICAL HAZARDS HUMAN HEALTH HAZARDS SKIN IRRIT. 2 - H315; EYE DAM. 1 - H318; SKIN SENS. 1 - H317, ASP. TOX. 1 - H304 ENVIRONMENTAL HAZARDS AQUATIC CHRONIC 2 - H411.	
2.2 LABEL ELEMENTS	LABEL IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.	
GHS LABEL	GHS07 GHS08 GHS09 GHS05	
Signal Word	Danger.	
CONTAINS	GERANYL ACETATE, GERANIOL, BETA PINENE, NEROL, (S)-P-MENTHA-1,8-DIENE, A TERPINOLENE, ALPHA PINENE	
HAZARDS STATEMENT	H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H411 Toxic to aquatic life with long lasting effects.	
Precautionary Statements	P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION. P301+P310 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER/ DOCTOR. P305+P351+P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. P391 COLLECT SPILLAGE. P501 DISPOSE OF CONTENTS/ CONTAINER IN ACCORDANCE WITH NATIONAL REGULATIONS. P262 DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.	
Supplementary Precautionary Statements	P261 AVOID BREATHING VAPOUR/ SPRAY. P264 WASH CONTAMINATED SKIN THOROUGHLY AFTER HANDLING. P272 CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE. P273 AVOID RELEASE TO THE ENVIRONMENT. P302+P352 IF ON SKIN: WASH WITH PLENTY OF WATER. P321 SPECIFIC TREATMENT (SEE MEDICAL ADVICE ON THIS LABEL). P331 DO NOT INDUCE VOMITING. P332+P313 IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/ ATTENTION. P333+P313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ ATTENTION. P362+P364 TAKE OFF CONTAMINATED CLOTHING AND WASH IT BEFORE REUSE. P405 STORE LOCKED UP.	
	Section 16 (Other Information): Risk & Safety phrases in full.	
2.3 OTHER HAZARDS		
Adverse physio-chemical properties	NO DATA	
Adverse effects on human health	MAY BE HARMFUL IN CONTACT WITH SKIN.	
PBT OR VPVB ACCORDING TO ANNEX XIII	NO DATA.	
SECTION 3: COMPOSITION OF INGREDIEN	TS	
3.2 MIXTURES	46 - 55% LINALYL ACETATE CAS: 115-95-7 EC: 204-116-4 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315; EYE IRRIT. 2 - H319	



CAS: 78-70-6 EC: 201-134-4 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315; EYE IRRIT. 2 - H319

4 - 8% A-TERPINEOL (P-MENTH-1-EN-8-OL) CAS: 98-55-5 EC: 202-680-6

CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315, EYE IRRIT. 2 - H319

2 - 5% GERANYL ACETATE CAS: 105-87-3 EC: 203-341-5 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315, SKIN SENS. 1B - H317, AQUATIC CHRONIC 3 - H412

0.01 - 4.5% GERANIOL CAS: 106-24-1 EC: 203-377-1 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315, EYE DAM. 1 - H318, SKIN SENS. 1 - H317

2 – 4.5% TRANS BETA OCIMENE CAS: 3779-61-1 EC: 223-241-5

CLASSIFICATION (EC 1272/2008) NOT CLASSIFIED.

0.01 - 3.5% NERYL ACETATE CAS:123-35-3 EC: 204-622-5

CLASSIFICATION (EC 1272/2008) NOT CLASSIFIED.

0.01 - 4% MYRCENE (7-METHYL-3-METHYLENEOCTA-1,6-DIENE) CAS: 123-35-3 EC:204-622-5

CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3 - H226, SKIN IRRIT. 2 - H315, EYE IRRIT. 2 - H319, ASP. TOX. 1 - H304

0.01 - 3% NEROL CAS: 106-25-2 EC: 203-378-7

CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315, SKIN SENS. 1 - H317, EYE IRRIT. 2 - H319

0.01 - 2% BETA-PINENE CAS: 127-91-3 FC: 204-872-5

CLASSIFICATION (EC 1272/2008) M FACTOR (ACUTE) = 1 M FACTOR (CHRONIC) = 1

FLAM. LIQ. 3 - H226, ASP. TOX. 1 - H304, SKIN IRRIT. 2 - H315, SKIN

SENS. 1 - H317

AQUATIC ACUTE 1 - H400, AQUATIC CHRONIC 1 - H410

0.01 - 2.5% (S)-P-MENTHA-1,8-DIENE CAS: 5989-54-8 EC: 227-815-6

CLASSIFICATION (EC 1272/2008) M FACTOR (ACUTE) = 1 M FACTOR (CHRONIC) = 1

FLAM. LIQ. 3 - H226, SKIN IRRIT. 2 - H315, SKIN SENS. 1 - H317 AQUATIC ACUTE 1 - H400, AQUATIC CHRONIC 1 - H410

0.01 - 1.5% A-TERPINOLENE CAS: 586-62-9 EC: 209-578-0CLASSIFICATION (EC

1272/2008) M FACTOR (ACUTE) = 1 M FACTOR (CHRONIC) = 1

SKIN SENS. 1 - H317, ASP. TOX. 1 - H304, AQUATIC ACUTE 1 - H400

AQUATIC CHRONIC 1 - H410

0.01 - 1% ALPHA-PINENE CAS: 80-56-8 EC: 201-291-9

CLASSIFICATION (EC 1272/2008) M FACTOR (ACUTE) = 1 M FACTOR (CHRONIC) = 1

FLAM. LIQ. 3 - H226, SKIN IRRIT. 2 - H315, SKIN SENS. 1 - H317,

ASP. TOX. 1 - H304, AQUATIC ACUTE 1 - H400, AQUATIC CHRONIC 1 - H410

SECTION 4: FIRST AID MEASURES			
4.1 DESCRIPTION OF FIRST AID MEASURES			
GENERAL INFORMATION	ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.		
INHALATION	GET MEDICAL ATTENTION IMMEDIATELY. REMOVE FROM EXPOSURE SITE TO FRESH AIR, KEEP AT REST, AND OBTAIN MEDICAL ATTENTION.		
Ingestion	GET MEDICAL ATTENTION IMMEDIATELY. RINSE MOUTH WITH WATER AND OBTAIN MEDICAL ATTENTION.		
SKIN CONTACT	REMOVE CONTAMINATED CLOTHES. WASH THOROUGHLY WITH SOAP AND WATER. CONTACT PHYSICIAN IF IRRITATION PERSISTS.		
EYE CONTACT	FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. CONTACT PHYSICIAN IF SYMPTOMS PERSIST.		
4.2 MOST IMPORTANT SYMPTOMS & EFFECTS (ACUTE & DELAYED)	INHALATION MAY CAUSE COUGHING AND DIFFICULTIES IN BREATHING. INGESTION IRRITATING TO THE RESPIRATORY TRACT AND MAY CAUSE DAMAGE TO THE CENTRAL NERVOUS SYSTEM. SKIN CONTACT TOXIC IN CONTACT WITH SKIN. EYE CONTACT MAY CAUSE EYE IRRITATION.		



SPECIAL TREATMENT REQUIRED	None expected, see Section 4.1 for further information.
SECTION 5: FIRE FIGHTING MEASURES	
5.1 EXTINGUISHING MATERIAL FOAM, CO2, DRY CHEMICAL POWDER.	
5.2 Special hazards arising from the substance Or mixture	BURNING PRODUCES IRRITATING, TOXIC AND OBNOXIOUS FUMES
5.3 Advice for fire-fighters	SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING.
SECTION 6: ACCIDENTAL RELEASE MEASU	JRE
6.1 Personal precautions	ENSURE ADEQUATE VENTILATION OF THE WORKING AREA, EVACUATE PERSONNEL TO SAFE AREA, WEAR SUITABLE PROTECTIVE EQUIPMENT. NO SMOKING, SPARKS, FLAMES OR OTHER SOURCES OF IGNITION NEAR SPILLAGE. AVOID CONTACT WITH SKIN, EYES AND CLOTHING.
6.2 Environmental precautions	DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES.
6.3 Methods & material for containment and cleaning up	REMOVE IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. AVOID EXCESSIVE INHALATION OF VAPOURS. CONTAIN SPILLAGE IMMEDIATELY BY USE OF SAND OR INERT POWDER. DISPOSE OF ACCORDING TO LOCAL REGULATIONS.
6.4 REFERENCES TO OTHER SECTIONS	REFER & CONSIDER SECTION 8. REFER & CONSIDER SECTION 13.
	HOT SURFACES NO SMOKING. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. USE IN ACCORDANCE WITH GOOD MANUFACTURING AND INDUSTRIAL HYGIENE PRACTICES. USE IN AREAS WITH ADEQUATE VENTILATION DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
7.1 Precautions for safe-handling	MANUFACTURING AND INDUSTRIAL HYGIENE PRACTICES. USE IN AREAS WITH ADEQUATE VENTILATION DO NOT EAT, DRINK OR
7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES 7.3	KEEP THE PRODUCT CONTAINER TIGHTLY CLOSED, IN A DRY, VENTILATED AREA. KEEP AWAY FROM POTENTIAL SOURCES OF IGNITION AND PROTECTED FROM LIGHT. MAINTAIN LIMITED CONTACT WITH OXYGEN.
ΝΟΙΣΑΤΑ	
	TO DATA.
SPECIFIC END USE(S) SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION	TO DATA.



- SEDIMENT (FRESHWATER); SHORT TERM 2.22 MG/KG
- SEDIMENT (MARINE WATER); SHORT TERM 0.222 MG/KG

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (CAS: 123-35-3)

DNEL

Workers - Dermal; Long term systemic effects: 0.83~mg/kg Workers - Inhalation; Long term systemic effects: $5.83~\text{mg/m}^3$ General population - Dermal; Long term systemic effects: 0.42~mg/kg General population - Inhalation; Long term systemic effects: $1.25~\text{mg/m}^3$

- PNEC
- STP; 0.2 MG/L - SOIL; 1.015 MG/KG
- FRESH WATER; 0.00028 MG/L
- MARINE WATER; 0.0008 MG/L
- SEDIMENT (FRESHWATER); 5.022 MG/KG
- SEDIMENT (MARINE WATER); 0.502 MG/KG

ALPHA PINENE (CAS: 80-56-8)

DNEL

Workers - Inhalation; Long term systemic effects: $5.98~\text{mg/m}^3$ General population - Oral; Long term systemic effects: 0.31~mg/kg General population - Inhalation; Long term systemic effects: $1.06~\text{mg/m}^3$

PNEC

- STP; 3.26 MG/L
- SOIL; 0.539 MG/KG
- FRESH WATER; 0.004 MG/L
- MARINE WATER; 0.0004 MG/L
- SEDIMENT (FRESHWATER); 1.033 MG/KG
- SEDIMENT (MARINE WATER); 0.103 MG/KG

8.2 EXPOSURE CONTROLS



EYE PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.	
HAND PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.	
RESPIRATORY EQUIPMENT	NO DATA	
HYGIENE MEASURES	GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.	
Engineering Measures	None.	
SKIN PROTECTION	WEAR PROTECTIVE CLOTHING TO REDUCE THE RISK OF SKIN AND EYE CONTACT.	
Personal Protection	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES.	
OTHER PROTECTION	WEAR SUITABLE PROTECTION TO AVOID CONTACT WITH SKIN AND EYES. DO NOT INHALE VAPOURS.	
PROCESS CONDITIONS	Ensure area is well ventilated. Avoid vapour inhalation. Safety shower & Eye Bath.	
ENVIROMENTAL EXPOSURE CONTROLS	AVOID DISCHARGING INTO DRAINAGE WATER.	

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

9.1 PHYSICAL & CHEMICAL PROPERTIES	
Appearance	CLEAR
COLOUR	Yellow - Brown
ODOUR	CHARACTERISTIC



RELATIVE DENSITY	0.888 @ 20°C
FLASH POINT (°C)	>74°C
REFRACTIVE INDEX @ 20 °C	1.457 @ 20°C
SOLUBILITY IN WATER @ 20 °C	INSOLUBLE IN WATER
9.2	INSOLUBLE IN WATER
OTHER INFORMATION	NO DATA
SECTION 10: STABILITY & REACTIVITY	
10.1 REACTIVITY	NO HAZARDOUS REACTIONS IF STORED AND HANDLED AS PRESCRIBED / INDICATED.
10.2 CHEMICAL STABILITY	Stable under suggested storage conditions (<15°C).
10.3 POSSIBILITY OF HAZARDOUS REACTIONS	No.
10.4 CONDITIONS TO AVOID	Storage at high temperatures. Do not store above 15°C.
10.5 INCOMPATIBLE MATERIALS	Strong oxidishing substances.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS	This product does not decompose under normal conditions. Under fire conditions the product will produce a mixture of irritating fumes & smoke & carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION		
11.1		
TOXICOLOGICAL EFFECTS		
Асите Тохісіту	NO DATA	
SKIN IRRITATION	NO DATA	
EYE DAMAGE OR IRRITATION	CAUSES EYE DAMAGE	
RESPIRATORY OR SKIN SENSITIVITY	NO DATA	
GERM CELL MUTAGENICITY	NO DATA	
CARCINOGENICITY	NO DATA	
REPRODUCTIVE TOXICITY	NOT APPLICABLE.	
STOT – SINGLE EXPOSURE	NOT APPLICABLE.	
STOT — REPEATED EXPOSURE	NOT APPLICABLE.	
ASPIRATION HAZARD	MAYBE FATAL IF SWALLOWED	
OTHER INFORMATION	NO DATA.	
SECTION 12: ECOLOGICAL INFORMATION		
12.1 Toxicity	TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.	
12.2		
PERSISTENCE & DEGRADABILITY	NO DATA	
12.3	NO DATA	
BIO- ACCUMULATIVE POTENTIAL 12.4		
MOBILITY IN SOIL	NO DATA.	
12.5	No Duti	
RESULTS OF PBT & VPVB ASSESSMENT	NO DATA.	
12.6 OTHER ADVERSE EFFECTS	DO NOT ALLOW PRODUCT TO ENTER STREAMS, SEWERS OR OTHER WATERWAYS.	



SECTION 13: DISPOSAL INFORMATION	
13.1 WASTE TREATMENT METHODS	ALWAYS RECOVER SPILLED PRODUCT. DISCARD WASTE MATERIAL WITH AUTHORIZED WASTE MANAGEMENT SERVICES. ACT IN ACCORDANCE WITH LOCAL & NATIONAL WASTE REGULATIONS.

SECTION 14: TRANSPORT INFORMATION	
14.1 Transport Information	
UN NUMBER	ROAD: 3082 RAIL: 3082 AIR: 3082
14.2 UN SHIPPING NAME	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S.
	ADR/RID/ADN CLASS 9 IMDG CLASS 9 ICAO CLASS/DIVISION 9
14.3 TRANSPORT HAZARD CLASS(ES)	
14.4 PACKING GROUP	ADR/RID/ADN PACKING GROUP III IMDG PACKING GROUP III ICAO PACKING GROUP
14.5 ENVIROMENTAL HAZARDS	ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT.
14.6 SPECIAL PRECAUTIONS FOR USER	EMS F-A, S-F ADR TRANSPORT CATEGORY 3 EMERGENCY ACTION CODE •3Z HAZARD IDENTIFICATION NUMBER (ADR/RID) 90 TUNNEL RESTRICTION CODE (E)
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	NO DATA.
SECTION 15: REGULATORY INFORMATION	
15.1 PRODUCT SPECIFIC SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS & LEGISLATION	
EU DIRECTIVES	REGULATION (EC) NO $1907/2006$ of the European Parliament and of the council of 18^{th}



	DECEMBER 2006. CONCERNING THE REGISTRATION, EVALUATION, AUTHORIZATION & RESTRICTION OF
	CHEMICALS (REACH), ESTABLISHING A EUROPEAN CHEMICALS AGENCY, AMENDING DIRECTIVE
	1999/45/EC and repealing council regulation (EEC) No793/93 & commission
	regulation (EC) No 1 488/94 as well as council directive 76/769/EEC & commission
	DIRECTIVE 91/155/ECC, 93/67/ECC, 93/105/EEC & 2000/21/EC (INCLUDING AMENDMENTS).
STATUTORY INSTRUMENTS	The Chemicals (Hazard Information & Packaging for Supply Regulations 2009 (S.I.2009
STATUTORT INSTRUMENTS	No 716).
Approved Code of Practice	Classification & labelling of substances & preparations dangerous for supply. Safety data
	SHEETS FOR SUBSTANCES & PREPARATIONS.
GUIDANCE NOTES	WORKPLACE EXPOSURE LIMITS EH40. CHIP FOR EVERYONE HSG 108.
15.2	
CHEMICAL SAFETY ASSESSMENT	-

SECTION 16: OTHER INFORMATION	
Hazard and/ or Precautionary Statements in full	H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
TRAINING INSTRUCTIONS: REFER TO POSSIBLE HAZARD BEFORE USE OF THIS PRODUCT.	
ABBREVIATIONS & ACRONYMS:	
MSDS	MATERIAL SAFETY DATA SHEET.
INCI	INTERNATIONAL NOMENCLATURE OF COSMETIC INGREDIENTS.
CAS	CHEMICAL ABSTRACT SERVICE.
IMDG	INTERNATIONAL MARITIME CODE FOR DANGEROUS GOODS.
ADR	ACCORD EUROPEAN SUR LE TRANSPORT DES MERCHANDISES DANGEREUSES PAR ROUTE (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD).
RID	International Carriage of Dangerous Goods by Rail.
ICAO	International Civil Aviation Organization.
ADN	International Carriage of Dangerous Goods by Inland Waterways.
GHS	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION & LABELLING OF CHEMICALS.
TREM CARD	TRANSPORT EMERGENCY CARD.
STOT	SPECIFIC TARGET ORGAN TOXICITY.

DOCUMENTATION REVISION	
DATE	CHANGE DESCRIPTION
10 [™] April 2018	Data Launch



SPECIFICATION SHEET

PRODUCT NAME: PETITGRAIN, ESSENTIAL OIL ORGANIC

PRODUCT INCI: CITRUS AURANTIUM AMARA (BITTER ORANGE) LEAF

CAS NUMBER: 689-04-1 / 72968-50-4

EINECS NUMBER: 277-143-2

MANUFACTURING METHOD: STEAM DISTILLED

SHELF LIFE / BEST BEFORE: 24 MONTHS

ANALYTICAL DETAILS	RANGE
Appearance	LIQUID
Colour	Pale Yellow - Brown
Odour	Characteristic
SPECIFIC GRAVITY @ 20°C	0.882 – 0.893
REFRACTIVE INDEX @ 20°C	1.450 – 1.465
OPTICAL ROTATION (°C)	-7.0 to +1.0

STORAGE CONDITIONS

STORE IN A COOL DRY PLACE AWAY FROM HEAT & SUNLIGHT

DOCUMENTATION REVIEW DATE:

24TH MAY 2018

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. The information is not to be disclosed to others, reproduced or transmitted in whole or in part without permission.



Vegetarian & Vegan Suitability Statement

PRODUCT NAME: Petitgrain Organic

MADAR Corporation Limited can confirm that the above listed product has not been tested in animals and does not contain dairy or any other animal product, by product or derivative and is therefore suitable for vegetarian and vegan use.

28/06/19