

1. Identification of the substances / mixture and of the company/undertaking.			
1.1 Product identifier: BERGAMOT OIL ITALIAN			
Substance name: CITRUS BERGAMIA PEEL OIL EXPRESSED			
EC NO: 89957-91-5	CAS NO: 8007-75-8	FEME NUMBER: 2153	
Index No:	Reach Registration No: 01-2120117613-65-XXXX		
FDA Number: 21 CFR 182.20	CoE Number: 137		
1.2 Relevant identified uses of the substance or mixture and uses advised against			
Identified uses: Odour agent/flavouring agent – ingredient for industrial manufacturing.			
Uses advised against: Not for personal use in this form or concentration			
1.3 Details of the supplier of the safety data sheet			
Company	Penny Price Aromatherapy Ltd		
	Unit D3 Radius Court		
	Maple Drive		
	Hinckley		
	Leicestershire LE10 3BE		
Email	info@penny-price.com		
1.4 Emergency Telephone Number	00 44 (0) 1455 251020 opening hours Mon – Thurs 9am – 5pm, Fri 9am – 2pm. Or call NHS 111 or NHS 999		
2. Hazards Identification			
2.1 Classification of the substance or mixture			
Classified according to Regulation (EC) 1272/2008 (CLP) as amended	Physical and Chemical Hazards	Flam. Liq. 3 + H226	
	Human Health	Asp.Tox.1 = H304	Skin Irrit. 2 = H315
		Skin Sens. 1 = H317	Eye Irrit. 2 = H319
	Environment	Aquatic Chronic 3 = H412	
2.2 Label Element Labelling according to Regulation (EC) No.1272/2008:			
			
Signal Word. DANGER			
Hazard statements.			
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.
H319	Causes serious eye irritation	H412	Harmful to aquatic life with long lasting effects
Precautionary Phrases:			
P210	Keep away from heat, sparks, open flames, and hot surfaces – No smoking	P280	Wear protective gloves / protective clothing / eye protection / face protection.
P331	Do NOT induce vomiting.	P301+ P310	IF SWALLOWED: Immediately call a POISON CENTRE / doctor.

P302 + P352	IF IN SKIN: Wash with plenty of water.	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue raising.
P273	Avoid release to the environment.		
2.3 Other hazards - Results of PBT and vPvB			
	Because of potential presence of various furocoumarins the product can have phototoxic effects (skin).		

3.1 Composition / information on ingredients:			
3.1	Substance	Product Identifier	BERGAMOT OIL ITALIAN
		Botanical Origin	Citrus bergamia, RISSO et POITEAU
		Chemical Identification & Grade	100% Natural Complex Substance
		EINECS CAS Number	89957-91-5
		CAS Number	8007-75-8
		EC Number	289-612-9
3.2 Contains:			
Substance name	Index number under CLP Annex VI	Weight % content (or range)	CL, M-Factor, ATE
d-limonene	CAS No; 5989-27-5 EC No; 227-813-5	20-55%	Aspiration Hazard 1, Environmental Chronic 1, Flammable Liquid 3, Skin Irritation 2, Skin Sensation 1B,
Linalool	CAS No: 78-70-6 EC No: 201- 134-4	3-45%	Acute Toxicity Oral 5, Eye Damage / Irritation 2A, Flammable Liquid 4, Skin Irritation 2,
Linalyl Acetate	CAS No: 115-95-7 EC No: 204- 116-4	15- 40%	Eye Damage / Irritation 2A, Flammable Liquid 4, Skin Irritation 2
Beta Pinene	CAS No: 127-91-3 EC No: 204 -872-5	3-12%	Aspiration Hazard 1, Flammable Liquid 3, Skin Irritation 2, Skin Sensation 1B
Y-terpinene	CAS No: 99-85-4 EC No: 202-794-6	2-12%	Aspiration Hazard 1, Flammable Liquid 3, Skin Irritation 3,
Alpha Pinene	CAS No: 80-56-8 EC No: 201-291-9	0.5 -4%	Aspiration Hazard 1, Flammable Liquid 3, Skin Irritation 2, Skin Sensation 1B Acute Toxicity Oral 5
Beta Myrcene	CAS No: 123-35-3 EC No: 204-622- 5	0.5 -2.5 %	Aspiration Hazard 1, Eye Damage / Irritation 2A, Flammable Liquid 3, Skin Irritation 2

4. First Aid Measures			
4.1 General		Immediately remove any clothing soiled by the product.	
Inhalation		Remove person to fresh air and keep comfortable for breathing. Get medical advice / attention if you feel unwell.	
Eye contact		Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice / attention.	
Skin contact		Take off all contaminated clothing. Rinse skin with water/shower. If irritation persists seek medical advice / attention	
Ingestion		Rinse mouth out with water. Do NOT induce vomiting. Immediately call POISON CENTER or GP. Do not give milk or fatty oils.	
4.2	Most important symptoms and effects, both acute and delayed:	Symptoms	Inhalation: Can cause slight headache Contact: Can cause eye irritation. Can cause slight skin rash.
		Acute and Delayed Effects	No post-disorder effects are reported.
4.3	Indication of any immediate medical attention and special treatment need	Immediate Medical Assistance	See Section 4.1
		Immediate / Special Treatment	See Section 4.1
		First Aid Specific Means	Eye wash capsules should be available in the workplace.
5. Firefighting Measures			
5.1 Extinguishing Media:			
Suitable extinguishing media:		Small Fire	Use Carbon dioxide (CO ₂), foam, dry powder.
		Large Fire	Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosion.
Unsuitable extinguishing media:		Pressurised water jet.	
5.2 Special hazards arising from the substances or mixture			
Hazardous combustion products:		Vapours may form explosive mixture with air. In case of fire the following can be released: Carbon Monoxide (CO), Carbon dioxide (CO ₂), smoke, soot.	
Advice for firefighters		Standard procedure for chemical fires. Spray extinguishing media to base of flames. Use adequate protections for respiratory apparatus, and protection bodysuits.	
6 Accidental release measures			
6.1 Personal precautions, protective equipment, and emergency procedures			
6.1.1 For non-emergency personnel			
Protective equipment:		In case of unintentional important release of the product in enclosed space use respiratory protection (Gas filter A, Colour Code brown: consider the maximum duration of wear) must be worn. Using insulating device for respiratory protection with an independent air supply in circumstances which are unclear. Use adequate protections solvent resistant: security shoes, bodysuit, gloves, and protection goggles, solvent-resistant (see Section 8).	

Emergency procedures:	Remove ignition source and ensure adequate ventilation in working areas following accidental releases.
6.1.2 For Emergency responders	As per non- emergency personnel.
6.2 Environmental precautions	Dispose of contents and containers in accordance with local, regional, national, international regulations. Keep away from drains. Keep away from surface and ground water.
6.3 Methods for cleaning up – 6.3.1 For containment:	
6.3.2 For cleaning up:	
6.3.3. Other information:	
6.4 Reference to other sections	Section 4, 8 and 13.

7. Handling and storage	
7.1 Precautions for safe handling	
Protective measures:	
Measures to prevent fire:	Avoid placing or handling near any sources of ignition. Avoid exposing to high temperature during processing.
Measures to prevent aerosol and dust generation:	Maintain adequate local and general ventilation where product is handled.
Measures to protect the environment:	During handling keep original container closed. Avoid contact with skin and eyes.
Advice on general occupational hygiene:	Do not ingest or apply to the skin as such. No smoking. Remove contaminated clothing. Good personal hygiene routines should be followed. If at risk of contamination, foods, drinks, and other articles of consumption must be stored or consumed at the workplace.
7.2 Conditions for safe storage, including any incompatibilities	
Technical measures and storage conditions:	
Packaging Materials:	
Requirements for storage and vessels:	To be stored in stainless steel drums, preferably under inert atmosphere (nitrogen) with minimum headspace, protected from day light. Take note: the container used during transportation must be considered only as a temporary container and it must not be considered in any case adequate for medium or long-term warehousing. Stored in a dry, aerated place, away from heat source and ignition source from 5°C to 20°C.
Storage Class: Further information on storage containers:	

7.3 Specific end use(s).	Use as odour agent / flavouring agent. The information of this section is not related to the use of the product in combination with any other material or any other process altering its characteristics.
Recommendations:	
Industrial sector specific solutions:	

8. Exposure controls/Personal protection

Where appropriate, use closed system to transfer and/or process this material. If appropriate, isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant.

8.1 Control parameters	Refer to the Exposure scenario document in Annex I.
8.2 Exposure controls	Refer to the Exposure scenario document in Annex I.
8.2.2 Personal Protection equipment	
8.2.2.1 Eye / face protection	Protective goggles with built-in frame tested to EN166 (should be checked regularly).
8.2.2.2 Skin Protection	
Hand protection	Suitable gloves tested to EN374 (should be checked regularly). Always use with clean, dry hands.
Other skin protection	Protective work clothing solvent resistant (should be checked regularly).
8.2.2.3 Respiratory protection	Not necessary in adequate local with general ventilation. Avoid breathing vapours.
Ventilation	
8.2.2.4 Thermal hazards	None
8.2.3 Environmental exposure controls	The usual precautions for safe handling have to be observed.

9. Physical and chemical properties- C of A

9.1 Information on basic physical and chemical properties

Colour	
Appearance	Yellow-greenish liquid
Odour	Citrusy
Melting Point / freezing point	
Boiling point /Initial boiling point & boiling range	N/D
Flammability	
Lower and upper explosion limit	N/D
Flash point °C	
Auto- ignition temperature	235°C at 101.89 kPa
Decomposition	N/D
pH	N/D
Kinematic Viscosity	N/D
Solubility	In alcohol and other oils. 87°C of the substance have solubility >40 mg /L into H ₂ O.
Partition coefficient n-octanol/ water (log value)	4.38 for the component d-limonene. 3.38 for the component Linalool. 4.39 for the component Linalyl Acetate
Vapour Pressure AT 25°C	123.1 Pa

Density and /or relative density	
Relative vapour density	N/D
Particle characteristics	
9.2 Other information	
Specific gravity d_{20}^{20}	0.8700 TO 0.8820
Optical rotation @ 20°C	
Refractive index @ 20°C	
Explosive Properties	None
Oxidising Properties	None
Typical analysis of major components	

10. Stability and reactivity	
10.1 Reactivity	This Substance does not react with water. The substance is unreactive if it is stored according to the recommendations in Section 7 and in accordance with the identified uses (see Subsection 1.2).
10.2 Chemical Stability	Stable substance when stored according to the recommendations in Section 7 and in accordance with the identified uses (see Subsection 1.2). Shelf Life: 18 months from date of production.
10.3 Possibility of hazardous reactions:	None if used according to storage and handling conditions (see Section 7) and identified uses (see Subsection 1.2).
10.4 Conditions to avoid:	Avoid exposure to highly oxidising agents.
10.5 Incompatible Materials:	Avoid exposure to highly oxidising agents.
10.6 Hazardous Decomposition Products	No known hazardous decomposition products under recommended storage and handling conditions. In case of combustion: Carbon monoxide (CO, Carbon monoxide (CO ₂).

11. Toxicological information	
11.1 Information on hazard classes as defined in Regulation (EC) No 1272 /2008	
Information on Toxicological Effects	Based on available information on Bergamot Oil and its constituents, Bergamot oil is expected to be readily and fully absorbed by the oral route (approximately 100%). Dermal absorption is expected to be lower. However, as no specific information is available on the extent of dermal and inhalation absorption, this is assumed to be comparable to oral absorption as a worst case. For risk assessment purposes, the absorption after oral, dermal and inhalation exposure are therefore assumed to be identical and route to route extrapolation from the oral to inhalation and dermal route is not required.
Acute toxicity: (Oral)	LD50:>10000 mg/kg bw (male) (method: rat (albino) gavage – equivalent Guideline 401 OECD).
Acute toxicity: (Dermal)	LD50:>20000 mg/ kg bw (method: rabbit (albino) – Guideline 402 OECD).
Acute toxicity: (Other Routes)	Not determined.
Skin corrosion /irritation:	
Seriously eye damage/irritation:	Not determined.
Respiratory or skin sensitisation:	Respiratory sensation; - Not determined. Considered as a skin sensitiser due to content of limonene and linalool.
Germ cell mutagenicity:	No adverse effect observed (negative).
Carcinogenicity:	Not determined.

Reproductive toxicity:	Oral Route: Adverse effect observed NOAEL: 365 mg/kg bw/day (rat) (read across with coriander oil study – Owner company: Lorillard, Inc.- Report date: 1989.04.12).
Development toxicity:	Oral Route: Adverse effect observed NOAEL: 365 mg/kg bw/day (rat) (read across with coriander oil study – Owner company: Lorillard, Inc.- Report date: 1989.04.12).
Summary of evaluation of the CMR properties:	Not determined.
STOT- single exposure,	Not determined.
STOT-repeated exposure:	Oral Route: target organs: urogenital: kidneys; digestive: stomach NOAEL: 117mg/bw/day (subacute; rat).
Aspiration hazard:	Can be fatal if swallowed and enters airways due to volatiles hydrocarbons content >10%

12. Ecological information

12.1 Toxicity	Aquatic Environment	Harmful to aquatic life with long lasting effects.
	Acute – Fish (Semi-static Freshwater)	LL50 (24h): 57 mg/L test mat. (nominal Oncorhynchus mykiss – metodo OECD Guideline 203 (Fish, Acute Toxicity Test). LL50 (48h): 18 mg/L test mat. (nominal Oncorhynchus mykiss – metodo OECD Guideline 203 (Fish, Acute Toxicity Test). LL50 (72h): 18 mg/L test mat. (nominal Oncorhynchus mykiss – metodo OECD Guideline 203 (Fish, Acute Toxicity Test). LL50 (96H): 18 mg/L test mat. (nominal Oncorhynchus mykiss – metodo OECD Guideline 203 (Fish, Acute Toxicity Test).
	Acute- Aquatic Invertebrates (Static Freshwater)	EL50 (24h): 60 mg/L test mat. – OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test). EL50 (48h): 33 mg/L test mat. – OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test). NOEL (48h): 18 mg/L test mat. (nominal) - OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test).
	Acute – Algae and Aquatic Plants (Static Freshwater)	EL50 (72h): 11 mg/L test mat. (Tested as WAF) (nominal) OECD Guideline 201 (Alga, Growth Inhibition Test).
	Acute – Other Organisms	Not tested
	Chronic	Not tested.
12.2 Persistency degradability	This substance is considered as a NCS readily biodegradable and therefore is not persistent.	
12.3 Bio accumulative potential	As the constituents are readily biodegradable is not expected.	
12.4 Mobility in soil	This substance is considered as a readily biodegradable NCS. Based on the ready biodegradability of the NCS, simulation tests in surface water, sediment and soil are not required.	
12.5 Results of PBT and vPvB Assessment	This substance is not PBT/vPvB.	
12.6 Endocrine disrupting properties		

12.7 Other adverse effects	Not determined.
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13. Disposal considerations	
13.1 Waste treatment methods	The containers used for this product must completely empty before disposal. Disposal on contents and containers should be in accordance with local/ regional/national/international regulations. Disposal of the product into the environment is illegal.
13.1.1. Product /Packaging disposal:	
13.1.2 Waste treatment-relevant information:	
13.1.3 Sewage disposal-relevant information:	
13.1.4 Other disposal-relevant recommendations:	

14. Transport information	
14.1 UN Number or ID number	UN1169
14.2 UN proper Shipping name	EXTRACTS, AROMATIC, LIQUID
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	Marine pollutant
14.6 Special precautions for user	This product contains constituents' flammables and dangerous to the environment. In case of pouring out, make sure to label new package, accordingly, reproducing original label with relevant symbols.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.

15 Regulatory information	
15.1 Safety, health, and environmental regulations / legislation specific for the substance or mixture	
I.e., EU Directives	No specific EU provisions and/ or regulations apply to this substance.
15.2 Chemical Safety Assessment	A study for the Chemical Safety Assessment of the substance was conducted during the preparation of registration for REACH.

16. Other information	
(i) Indication of Changes: Revised Safety Data Sheet Format: From March 2019. - Section 2 and 3 have changed places, additional points added under each section in line with Regulation EC) No 1272/2008 Version 4.2 March 2021'.	
(ii) Abbreviations and acronyms:	
CSR	Chemical Safety Report
CSA	Chemical Safety Assessment.
CLP	Regulation (EU) No. 1272/2008
Asp. Tox.	Aspiration Hazard
Aquatic Chronic	Aquatic Chronic
Skin Irrit.	Skin Irritation Hazard
Skin Sens.	Skin Sensitisation Hazard

Eye Irrit.	Eye Irritation Hazard		
Flam. Liq	Flammable Liquid Hazard		
WAF	Water Accommodated Fractions		
LD50	Lethal Dose 50.		
LL50	Lethal Loading 50.		
EL50	Effective loading 50.		
NOAEL	No-Observed Adverse Effect Level.		
NOEL	No-Observed Effect Level.		
LOEL	Lowest Observed Effect Level.		
OECD	Organisation for Economic Co-operation and Development.		
(iii) Key Literature references and sources of date. = Inventories			
	CAS	ID	Note
EINECS	89957-91-5	289-612-9	
TSCA	8007-75-8	-	
IECSC	8007-75-8	-	
KECI	8007-75-8	KE-26829	
DSL	8007-75-8	-	
AICS	8007-75-8	-	
ENCS-ISHL	8007-75-8	11-(1)-575	
NZIOC	8007-75-8	-	
PICCS	8007-75-8	-	
FDA	-	21CFR182.20	
CoE	-	137	
FEMA	8007-75-8	2153	
HS Code	-	3301192000	EU TARIC
16.3	Contaminants	This product has been analysed to ensure that the levels of heavy metals, phthalates and allergens are respectively compliant with the relevant regulations.	
(iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP):			
Classification according to Regulation (EC) 1272/2008(CLP)	Classification procedure		

(v) Relevant H-statements (number and full text):	
(vi) Training advice:	
(vii) Further information:	
Shelf life	Minimum 12 months when stored in the advised conditions.
QC requirements	
In line with general product specification. Always satisfy suitability for specific application. Retest after 6 months.	
Disclaimer:	
<p>The data provided in this material safety data sheet is meant to represent typical data/analysis for this product and is correct to the best of our knowledge. The data was obtained from current and reliable sources, but is date supplied without warranty, expressed, or implied, regarding its correctness or accuracy. It is the user's responsibility to determine safe conditions for the use of this product and to assume liability for loss, injury, damage, or expense arising from improper use of this product. The information provided does not constitute a contract to supply to any specification or for any given application and buyers should seek to verify their requirements and product use.</p>	

The information in this MSDS is correct to the best of our knowledge, covering the involved product at the date of its publication. They apply to the product as such as per the described specifications. The information is not related to the use of the product in combination with any other material or any other process altering its characteristics. The end user should apply to the existing normative and laws covering the use of the product, the hygiene and security at work. The container used during transportation must be considered only as a temporary container and it must not be considered in any case adequate for medium or long-term warehousing. Upon receipt, our product must be stored as soon as possible in compliance with Section 7 of this MSDS. The information given in this MSDS is in accordance with the Reg. (EU) No. 2015/830, Reg. (EC) No. 1907/2006 and Reg. (EC) No. 1272/2008.