

1. Identification of the substances / mixture and of the company/undertaking.			
1.1 Product identifier: Organic Thyme Essential Oil			
Substance name: (Thymus vulgaris) CT Thujanol			
Biological Definition	Product Name: Thyme Thujanol		
INCI Name	Product Code: B920		
Synonyms & Trade Names			
EC NO:	CAS NO: 8007-46-3	EINECS CAS Number: 84929-51-1	
Index No:	Reach Registration No:		
1.2 Relevant identified uses of the substance or mixture and uses advised against			
Identified uses: Only for industrial use.			
Uses advised against:			
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	
	Environment	Aquatic Chronic. 2 – H411	
2.2 Label Element Labelling according to Regulation (EC) No.1272/2008:			
			
Signal Word. WARNING			
Hazard statements.			
H226	Flammable liquid and vapours.	H304	Maybe fatal if swallowed and enters airways
H315	Causes Skin Irritation.	H317	May cause an allergic skin reaction.
H411	Toxic to aquatic organisms, causes long-term adverse effects.		

Precautionary statements.	
P210	Keep away from heat, hot surfaces, sparks, open flames and any other sources of ignition. Do not smoke.
P233	Keep the container tightly closed.
P240	Grounding / bond container and receiving equipment.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER / Doctor.
P403 + P235	Store in a well-ventilated place. Keep Cool.
P501	Dispose of contents / container in accordance with local / regional / national / international regulations.
Supplementary Precautionary Statements:	
2.3 Other hazards – Results of PBT and vPvB According to Annex XIII	Not applicable
Adverse Physio-chemical Properties	
Adverse Effects on Human Health	

3. 1 Composition / information on ingredients:

Substances

No CAS: 8007-46-3

Description: Thymus vulgaris L.

1. Code(S) Identification

2. EC Number: 284-535-7

Substance name	Index number under CLP Annex VI	Weight % content (or range)	CL, M-Factor, ATE
Linalool	CAS: 78-70-6 EC: 201-134 -4	20,001-	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens.1B – H317
p-menth-1-ene-4-ol (4-terpineol)	CAS: 562- EC: 209-235-5	10,001-	Eye Irrit. 2 – H319
myrcene	CAS: 123-35-3 EC: 204-622-5	5,001 -10,00	Flam. Liq. 3 – H226 Asp. Tox. 1 – H304 Skin Irrit. 2 – H315 Eye Irrit. 2 – H319
terpinene alpha	CAS: 99-86-5 EC: 202-795-1	5,001 -10,00	Flam. Liq. 3 – H226 Asp. Tox. 1 – H304 Acute Tox. 4 – H302 Aquatic Chronic. 2 – H411
acetate linalyle	CAS: 115 -95-7 EC: 204-116-4	5,001 -10,00	Skin Irrit. 2- H315 Eye Irrit. 2 - 319
caryophyllene	CAS: 87-44-5	5,001 -10,00	Asp. Tox. 1 – H304

	EC: 201-746-1		Skin Sens. 1B – H317
limonene-d	CAS: 598-927-5 EC: 227-813-5	5,001 -10,00	Flam. Liq. 3 – H226 Asp. Tox. 1 – H304 Skin Irrit. 2 - H315 Skin Sens. 1B – H317 Aquatic Acute. 1 – H400 Aquatic Chronic. 3 – H412
sabinene	CAS: 338-741-5 EC: 222-212-4	1,001 -5,00	Acute. Tox. 4 – H302
p-menth-1-en-8-ol	CAS: 98-55-5 EC: 202-680-6	1,001 -5,00	Skin Irrit. 2 – H315 Eye Irrit. 2 – H319
p-mentha-1,4(8)-diene (terpinolene)	CAS: 586-62-9 EC: 209-578-0	1,001 -5,00	Asp. Tox. 1 – H304 Skin Sens. 1B – H317 Aquatic Acute. 1 – H400 Aquatic Chronic. 1 -H410
acetate terpenyle	CAS: 800-735-0 EC: 232-357-5	1,001 – 5,00	Aquatic Chronic. 2 – H411
geraniol	CAS: 106-24-1 EC: 203-377-1	1,001 -5,00	Eye dam. 1 – H318 Skin Irrit. 2 – H315 Skin Sens. 1B – H317
p-cymene	CAS: 99-87-6 EC: 202-796-7	1,001 -5,00	Flam. Liq. 2 – H226 Asp. Tox.1 – H304 Aquatic Chronic. 2 -H411
pin-2(10)-ene (pinene beta)	CAS: 127-91-3 EC: 204-872-5	1,000 -5,00	Flam. Liq. -3 -H226 Asp. Tox. – 1 – H304 Skin Irrit. 2 – H315 Skin Sens. 1B – H317
citral	CAS: 539-240-5 EC: 226-394-6	1,001 – 5,00	Skin Irrit. 2 – H315 Eye Irrit. 2 – H319 Skin Sens. 1B – H317
oct-1-ene-3-ol	CAS: 339-186-4 EC: 222-226-0	0, 101- 1,00	Acute Tox. 4 – H302 Acute Tox. 4 – H332 Skin Irrit. 2 – H315 Eye Irrit. 2 - H319 Aquatic Acute. 1 – H400
epoxycaryophyllene	CAS: 113-930-6 EC; 214-519-7	1,101-1,00	Aquatic Chronic. 2 – H411
eucalyptol	CAS: 470-82-6 EC; 207-431-5	0,101 -1,00	Flam. Liq. 3 – H226 Skin Sens. 1B – H317
thymol	CAS: 89-83-8 EC; 201-944-8	0,101-1,00	Skin Corr. 1B – H314 Eye Dam. 1 – H318 Acute. Tox. 4 – H302 Aquatic Chronic. 2 – H411
camphene	CAS: 79-92-5 EC; 201-234-8	0,101-1,00	Flam. Sol. 1 – H228 Aquatic Acute. 1 – H400

			Aquatic Chronic. 1 – H410
carvacrol	CAS: 499-75-2 EC; 207-234-8	0,101-1,00	Acute Tox. 4 – H302 Skin Irrit. 2 – H315 Eye Irrit. 2 – H319 Skin Sens. 1B – H317
pin-2(3)-ene (alpha pinene)	CAS: 80-56-8 EC; 201-291-9	0,101-1,00	Flam. Liq. 3 – H226 Asp Tox. 1 -H304 Acute Tox. 4 – H302 Skin Irrit. 2 – H315 Skin Sens. 1B – H317
delta-3-carene	CAS: 134-667-89 EC; 236-719-3	0,101-1,00	Flam. Liq. 3 – H226 Asp. Tox. 1 - H304 Skin Irrit. 2 – H315 Skin Sens. 1B – H317

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. Obtain medical attention if required.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If irritation persists seek medical advice / attention.
Skin contact	Take off all contaminated clothing. Rinse skin with water/shower. If irritation persists seek medical 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:

	No further relevant information available.
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4.3 Indication of any immediate medical attention and special treatment need

	No further relevant information available.
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5. Firefighting Measures

5.1 Extinguishing Media:

Suitable extinguishing media:	CO2, sand, extinguishing powder. Do not use water. Adapt fire extinguishing measures to the environment
Unsuitable extinguishing media:	High flow water jet

5.2 Special hazards arising from the substances or mixture: None

Hazardous combustion products:	Possibility of formation of toxic gases in case of heating or fire.
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5.3 Advice for firefighters

	Do not inhale blast gases and fire gases. Cool containers in danger by spraying water.
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6 Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures	
6.1.1 For non-emergency personnel	
Protective equipment:	
Emergency procedures:	Wear safety equipment . Keep unprotected people away. Ensure sufficient ventilation . Keep away from ignition sources .
6.1.2 For Emergency responders	
6.2 Environmental precautions	Do not discharge into the sewer or into the natural environment .
6.3 Methods for cleaning up –	Dispose of the material collected in accordance with the Regulation.
6.3.1 For containment:	
6.3.2 For cleaning up:	
6.3.3. Other information:	
6.4 Reference to other sections	For information on safe handling, see Chapter 7. For information on personal protective equipment, see Chapter 8. For information on waste disposal see Chapter 13.

7. Handling and storage	
7.1 Precautions for safe handling	
Protective measures: Prevent formation of aerosols. Handle in a well-ventilated area, away from sources of ignition. DO NOT SMOKE. Apply good manufacturing practice and industrial hygiene practices, ensuring proper workplace ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.	
Measures to prevent fire:	Keep away from ignition sources - do not smoke. Take measures against electrostatic charges.
Measures to prevent aerosol and dust generation:	
Measures to protect the environment:	
Advice on general occupational hygiene:	Hold containers tightly closed. Protect from high heat and direct sunlight. Ensure good ventilation/suction of the workstation . Handle with care. Avoid shaking, friction and shock.

7.2 Conditions for safe storage, including any incompatibilities	
Technical measures and storage conditions:	Keep only in the original barrel. Use only packaging specially approved for the material/product
Packaging Materials:	
Requirements for storage and vessels:	Hold packages tightly closed. Protect from high heat and direct sunlight. Store packaging in a well-ventilated area.
Storage Class: Further information on storage containers:	
7.3 Specific end use(s).	No other important information available.
Recommendations:	
Industrial sector specific solutions:	

8. Exposure controls/Personal protection:	
8.1 Control parameters	No data.
8.2 Exposure controls	General protection and hygiene measures: Comply with the usual safety measures for the use of chemicals. Wash hands before breaks and at the end of work.
Engineering Measures	Ensure good ventilation of working area.
8.2.2 Personal Protection equipment	
8.2.2.1 Eye / face protection	Protective Glasses
8.2.2.2 Skin Protection	
Hand protection	Protective Gloves The material of the gloves must be waterproof and resistant to the product/substance/preparation. Due to the lack of testing, no recommendation for a glove material for the product/preparation/mixture of chemicals can be given. Choice of glove material based on penetration times, permeability rate and degradation. Glove material The choice of suitable gloves depends not only on the material, but also on other quality criteria that may vary from one manufacturer to another. Penetration time of glove material The exact penetration time is to be determined by the manufacturer of the protective gloves and to be respected.
Other skin protection	
8.2.2.3 Respiratory protection	Use a respirator if ventilation is insufficient.

Ventilation	
8.2.2.4 Thermal hazards	
8.2.3 Environmental exposure controls	
9. Physical and chemical properties- C of A	
9.1 Information on basic physical and chemical properties	
Colour	Pale yellow to yellow orange
Appearance	Liquid
Odour	Characteristic
Melting Point / freezing point	Not determined
Boiling point /Initial boiling point & boiling range	
Flammability	Not determined
Lower and upper explosion limit	
Flash point °C	60.0°C / NFT 60-130 CC
Auto- ignition temperature	
Decomposition temperature	
pH	
Kinematic Viscosity	
Solubility in / miscibility with water	Not determined
Solubility in other Solvents	
Partition coefficient n-octanol/ water	Not determined
Vapour Pressure	Not determined.
Density	Not determined.
Relative vapour density	0.8920 0.915 D20/20
Particle characteristics	
Explosive Properties	Not determined
Oxidising Properties	
9.2 Other information	No other important information available.
Specific gravity	
Optical rotation @ 20°C	
Refractive index @ 20°C	
Typical analysis of major components	
10. Stability and reactivity	
10.1 Reactivity	No other important information available.
10.2 Chemical Stability	Thermal decomposition / conditions to be avoided: Not determined.
10.3 Possibility of hazardous reactions:	No known dangerous reactions.
10.4 Conditions to avoid:	No other important available.
10.5 Incompatible Materials:	No other important available.

10.6 Hazardous Decomposition Products	
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11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272 /2008

Information on Toxicological Effects

Acute toxicity:	Classification determinant LD/LC50 values: ISO LD/LC
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CAS	Name		
800-746-3	Thymus Vulgaris L.	Oral – LD50; Dermal – LD50	4700 mg/kg (rat) > =5000 mg/kg (rabbit)
78-70-6	Linalool	Oral - LD50 Dermal – LD50	2790 mg /kg (rat) 5610 Mg/kg (rabbit)
87-44-5	Caryophyllene	Oral – LD50	> 5000 mg /kg (rat) (Hart and Wong 1971)
598 -927-5	Limonene-d	Oral -LD50	4400 mg/kg (rat)
98-55-5	p-menth-1-en-8-ol	Oral - LD50	4300 mg /kg (rat)
539 -240-5	Citral	Oral -LD50	4960 mg /kg (rat)
331-186-4	oct-1-ene-3-ol	Oral -LD50 Dermal – LD50	340 mg/kg (rat) 3300 mg/kg (rabbit)
113-930-6	epoxycaryophyllene	Oral -LD50	> 5000 mg/kg (rat) (Moreno 1978)
470-82-6	eucalyptol	Oral – LD50	3849 mg/kg (mice) (Jiao Xu, 2014)
89-83-8	Thymol	Oral – LD50	980 mg /kg (rat)
79-92-5	camphene	Oral - LD50 Dermal – LD50	5000 mg/kg (rat) 2500 mg/ kg (rabbit)
499-75-2	carvacrol	Oral – LD50	810 mg/kg (rat)
134-667-89	delta-3-carene	Oral -LD50	4800 Mg/kg (rat) (Moreno 1975)

Skin corrosion /irritation:	No irritation effect.
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Seriously eye damage/irritation:	No irritation effect.
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Respiratory or skin sensitisation:	No known awareness effects. Sub acute to chronic – toxicity.
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Germ cell mutagenicity:	Not determined
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Carcinogenicity:	Not determined
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Reproductive toxicity:	Not determined.
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Summary of evaluation of the CMR properties:	
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STOT- single exposure,	Not determined
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STOT-repeated exposure:	Not determined
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Aspiration hazard:	
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12. Ecological information		
12.1 Toxicity		
Aquatic Toxicity		
8007-46-3 Thymus vulgaris L.	EC50	/ 48h: 11.00 mg/l (daphnia)
78-70-6 linalol	LD50: ErC50 ErC50	27.7 mg/l (fish) ((OECD 203) IMFB 1991) (0-72H): 156.7 mg/l (algae) (0.48h): 59 mg / l (daphnia) (OECD 202)
123-35-37-methyl-3-methyleneocta-1,6-diene (myrcene)	LD50: EC50	0.51 mg/l (fish) (OECD) /48h: 0.65 mg/l (daphnia)
115-95-7 acetate linalyle	ErC50 ErC50 LD50	(0.72h): 9.6 mg/l (algae) (IMFN 2015) (0.48h): 15 mg/l (daphnia) (IMFN 2015) 96h: 11 mg/l (fish) (IMFN 1998)
5989-27-5 limonene-d	LD50	0.71 mg/l (fish) (OECD 203)
99-87-6 p-cymene	LD50	1.63 mg/l (fish) (OECD 203)
12.2 Persistency & degradability Behaviour in environment compartments:	No other important information available. Not determined.	
12.3 Bio accumulative potential	No other important information available.	
12.4 Mobility in soil	No other important information available.	
12.5 Results of PBT and vPvB Assessment	Non applicable	
12.6 Endocrine disrupting properties		
12.7 Other adverse effects	No other important information available.	
13. Disposal considerations		
13.1 Waste treatment methods	Must be subject to special treatment in accordance with legal requirements.	
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:	Dispose of contents / container in accordance with local / regional / national / international regulations.	
14. Transport information		
14.1 UN Number or ID number ADR/ IMDG / IATA	UN1169	
14.2 UN proper Shipping name ADR IMDG	1160 EXTRACTS, AROMATIC, LIQUID EXTRACTS, AROMATIC, LIQUID (THYMUS VULGARIS L.)	

IATA	EXTRACTS, AROMATIC, LIQUID
14.3 Transport hazard class(es) ADR	 
Class Label	3 (F1) Flammable Liquid 3
IMDG	 
Class Label	3 Flammable Liquid 3
IATA	
Class Label	3 Flammable Liquid 3
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards	Marine:
14.6 Special precautions for user Warming: Kemler Index: No EMS:	Flammable Liquids 30 F-E, S-D
14.7 Maritime transport in bulk according to Annex II to MARPOL 73/78 and the IBC Code	Non Applicable
Additional Transport Information Excepted Quantities (EQ) Limited quantities (LQ) Transport Category Tunnel Restriction Code IMDG Limited quantities (LQ) Excepted quantities (EQ)	E1 5L 3 D/E - - E1 E1

15 Regulatory information	
15.1 Safety, health, and environmental regulations / legislation specific for the substance or mixture	
National Requirements: Water Pollution Class	Generally non-polluting
15.2 Chemical Safety Assessment	A chemical safety assessment has not been carried out.

16. Other information	
<p>(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’.</p>	
<p>(ii) Abbreviations and acronyms: NOAEL: No observed adverse effect level OECD: Organisation for Economic Co-operation & Development IFRA: International Fragrance Association IOFI: International Organisation of the Flavour Industry DNEL: Derived No-Effect Level. PNEC: Predicted No- Effect Concentration. ADR: European agreement concerning the international carriage of dangerous goods by road. RID: Regulations concerning the International carriage of Dangerous goods by rail. IATA-DGR: Dangerous Goods Regulations by the “International Air Transport Association” (IATA) ICAO: International Civil Aviation Organisation ICAO-TI: Technical Instructions by the ‘International Civil Aviation Organisation” (ICAO) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association ICAO: International Maritime Dangerous Goods. GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) WGK: Water Hazard Class. LC50: Lethal concentration, 50 percent LD50: Lethal Dose, 50 percent CE50: Effective concentration at 50% ErC50: Concentration of test substance which results in a 50 percent reduction in either growth rate (ErC50) relative to the control within 72hrs exposure. PBT: Persistent, Bio accumulative and Toxic vPvB: Very Persistent and very Bio accumulative Flam. Liq: Flammable Liquid AT: Acute Toxicity – O = Oral / D = Dermal / I = Inhalation Asp: Aspiration Hazard Skin Corr/ Irrit: Skin Corrosion / Irritation Skin Sens: Skin Sensation Eye Dam/ Irrit: Eye damage / Irritation Muta: Mutagenic Carc: Carcinogenic Resp: Respiration Sensitive Repro: Reproductive Sensitive EH A: Environmental Hazard Aquatic Acute</p>	

EH C: Environmental Hazard Aquatic Chronic

(iii) Key Literature references and sources of date.

IFRA/IOFI Labelling Manual, REACH Registration Dossier, Supplier Information.

(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:

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.