





Safety Data Sheet

Organic Grapefruit Essential Oil (Citrus paradisi)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

1.1 Product Identifier					
Product Name		Grapefruit Oil Organic			
Biological Definition		Citrus Paradisi Peel Oil is the volatile oil expressed from the peel of the Grapefruit, Citrus paradisi, Rutaceae.			
INCI Name		Citrus Paradisi Peel Oil			
Synonyms & Trade Names		-			
CAS-No	8016-20-4	EC No.	N/A	EINECS No.	N/A
1.2 Relative identified uses of the substance or mixture and uses advised against					
Relevant 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					
1.4 Emergency Tel. No.					

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
The Full Text for all Hazard Statements displayed in Section 16.	
Classification (EC 1272/2008)	
Flammable Liquid, Hazard Category 3 - H226 Skin Corrosion / Irritation Category 2 - H315 Sensitization - Skin Category 1 - H317 Aspiration Hazard Category 1 - H304 Hazardous to the Aquatic Environment – Aquatic Chronic Category 1 - H410	
2.2 Label Elements	
Label in accordance with (EC) No 1272/2008	
GHS02 	GHS07 
GHS08 	GHS09 
Signal Word	Danger.
Contains	Limonene, Myrcene,
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. H410, Very toxic to aquatic life with long lasting effects.	
Precautionary Statements	
P210, Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P241, Use explosion-proof electrical, ventilating and lighting equipment. P261, Avoid breathing vapour or dust. P273, Avoid release to the environment. P280, Wear protective gloves/eye protection/face protection. P301/310, IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P303/361/353, IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P331, Do not induce vomiting.	
Supplementary Precautionary Statements	
P405, Store locked up. P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.	
2.3 Other Hazards	
PBT or vPvB according to Annex XIII	No.
Adverse physio-chemical properties	Combustible but should not self-ignite.
Adverse effects on human health	Skin contact may cause irritation/sensitisation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures	
≤ 97.0% Limonene	CAS-No: 5989-27-5; EC No.: 227-813-5
Classification (EC 1272/2008) Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Asp. Tox. 1 - H304, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	
≤ 2.0% Myrcene	CAS No: 123-35-3 ; EC No: 204-622-5
Classification (EC 1272/2008) Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Aquatic Chronic 3 - H412	

4. FIRST AID MEASURES

4.1 Description of first aid measures	
Inhalation	Remove from exposure area to fresh air. Obtain medical advice if irritation persists.
Ingestion	Wash mouth out with water and obtain medical advice immediately. Do not induce vomiting.
Skin Contact	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation persists or there is any sign of tissue damage.
Eye Contact	Flush with plenty of water and seek medical advice.
4.2 Most important symptoms and effects, both acute and delayed	
Symptoms:	Inhalation: can cause slight headache. Contact: can cause bloodshot eyes. 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 needed	
see Section 4.1 for further information. Eye wash fountain and safety shower should be available in the work area.	

05. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media	
Suitable extinguishing media: Small fire: CO ₂ , Dry powder, Foam. Spray to base of flames	

	Large fire: use water spray or fog. Cool containing vessels with water to prevent pressure build up, auto-ignition or explosion. Unsuitable extinguishing media: pressurised water jet.
5.2	Special hazards arising from the product
	Vapours may form explosive mixture with air. In case of fire, the following can be released: Carbon monoxide, carbon dioxide, smoke, soot.
5.3	Advice for firefighters
	Standard procedure for chemical fires: spray extinguishing media to base of flames. Use adequate respiratory protection to avoid inhalation of vapours. Wear suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment and emergency procedures
	In an emergency (i.e. unintentional important release of the product in an enclosed space) respiratory protection must be worn. (Gas filter A, colour code brown: consider the maximum duration for wear). Use insulating device for respiratory protection with an independent air supply in circumstances which are unclear. Use adequate protections that are solvent resistant: security shoes, bodysuit, gloves, protective goggles. Remove any ignition source and ensure adequate ventilation in working areas following accidental releases.
6.2	Environmental Precautions
	Do not discharge into drains, water courses or onto the ground.
6.3	Methods and material for containment and cleaning up.
	Remove ignition sources. Ensure adequate ventilation. Absorb with inert, non-combustible, inorganic absorbent material, sweep up and remove to an approved disposal container.
6.4	Reference to other sections
	See sections 4, 8 and 13.

7. HANDLING AND STORAGE

7.1	Precautions for safe handling
	Apply good manufacturing practice & industrial hygiene practices, ensuring proper workplace ventilation. Wear adequate protection to avoid contact with skin and eyes. Ensure adequate ventilation at all times. Observe good personal hygiene, and do not eat, drink or smoke whilst handling. Do not ingest. Keep away from heat, sparks and open flame.
7.2	Conditions for safe storage, including any incompatibilities
	Store in tightly closed original container (stainless steel drum, preferable under inert atmosphere. E.g. nitrogen), in a cool, dry & ventilated area away from heat sources. Protect from light. Take precautionary measures against static discharge. 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.
7.3	Specific end use(s)
	Use as an odour agent / flavouring agent: Use in accordance with good manufacturing and industrial hygiene practices.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	Control parameters
	No additional data available.
8.2	Exposure controls
	Protective Equipment



Process Conditions	Provide eyewash station.
Engineering Measures	Provide adequate ventilation where appropriate, use closed system to transfer and process this material. If appropriate, isolate mixing rooms and other areas where this material is used or openly handles. Maintain these areas under negative air pressure relative to the rest of the plant.
Respiratory Equipment	Not necessary in adequate ventilation of working area. Avoid inhalation of vapours.
Hand Protection	Avoid all skin contact. Wear chemical resistant gloves tested to EN374.
Eye Protection	Avoid contact with eyes. Wear approved safety goggles with built in frames tested to EN166.
Other Protection	No additional data available.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils. Keep away from foodstuffs, beverages and feed.
Personal Protection	Avoid inhalation and contact with skin and eyes.
Skin Protection	Wear protective clothing to avoid all skin contact.
Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorised companies.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid, yellow.
Colour	Yellow.
Odour	Characteristic – citrus, grapefruit.
Relative Density	0.836 – 0.846 @ 20°C
Flash Point (°C)	~47.0
Refractive Index	1.468 to 1.478 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	~170.0 ± 10.0 @ 1029 hPa
Vapour Pressure	186.4 Pa @25°C
Solubility in Water @20°C	Insoluble in water. Soluble in alcohol and other oils.
Auto-ignition temperature (°C)	~ 235.0

9.2 Other information

No additional data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Presents no significant reactivity hazards, by itself or in contact with water.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possible hazardous reactions

Not expected under normal temperature conditions and recommended use.

10.4 Conditions to Avoid

Avoid exposure to heat, sparks and open flames.

10.5 Incompatible materials

Avoid contact with strong acids, alkalis and oxidising agents.
10.6 Hazardous Decomposition Products
No known hazardous decomposition products under normal temperature conditions and recommended use.

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	LD50: > 5.0 g/kg (source RIFM)
Skin corrosion / irritation	Causes skin irritation (H315).
Serious eye damage / irritation	Not classified as irritating to the eye. (source RIFM).
Respiratory or skin sensitisation	May cause an allergic skin reaction (H317).
Germ Cell Mutagenicity	No additional data available.
Carcinogenicity	No additional data available.
Reproductive toxicity	No additional data available.
STOT-single exposure	No additional data available.
STOT-repeated exposure	No additional data available.
Aspiration hazard	May be fatal if swallowed and enters airways (H304).
Photo-toxicity	No additional data available.
Other Information	No additional data available.

12. ECOLOGICAL INFORMATION



12.1 Toxicity	
Aquatic life: Very toxic to aquatic life with long lasting effects. (H410). Algae/aquatic plants: EC50: 14.0 mg/l (48h) calculated value (source RIFM). Fish/aquatic vertebrates: no additional data available. PNECs: no additional data available.	
12.2 Persistence & degradability	
This material is considered readily biodegradable, therefore does not fulfil the criteria for persistence.	
12.3 Bioaccumulation Potential	
Very toxic to aquatic life with long lasting effects. (H410).	
12.4 Mobility in soil	
This material is considered readily biodegradable, therefore simulation tests in surface water, sediment and soil are not required in accordance with column 2 of REACH Annex IX.	
12.5 Results of PBT and vPvB Assessment	
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.	
12.6 Other adverse effects	
Do not discharge into the environment especially not into waterways, sewers and the sea.	

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	
Do not release into the environment. Collect waste into suitable containers and contact hazardous chemical disposal company.	

14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	UN 1169
UN No. SEA	UN 1169

UN No. AIR	UN 1169
14.2 UN proper shipping name	
Extracts, Aromatic, Liquid.	
14.3 Transport hazard class(es)	
ADR/RID/ADN Class: 3 Flammable Liquid. IMDG Class: 3 Flammable Liquid. ICAO Class/Division: 3 Flammable Liquid. Transport Labels 	
14.4 Packing group	
ADR/RID/ADN Packing group III IMDG Packing group III	
14.5 Environmental hazards	
Environmentally Hazardous Substance/Marine Pollutant. 	
14.6 Special precautions for user	
This product contains constituents flammable & dangerous for the environment. In case of pouring out, make sure to label new package accordingly, reproducing original label with relevant symbols.	
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	
No additional data available.	

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
<u>Statutory Instruments</u> The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). <u>Guidance Notes</u> Workplace Exposure Limits EH40. CHIP for everyone HSG(108). <u>EU Legislation</u> Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.	
15.2 Chemical safety assessment	
No additional information available.	

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. H410, Very toxic to aquatic life with long lasting effects.
Other Information	Complies with REACH guidance for SDS as circulated by ECHA 2011.
Revision Date	19/05/2016
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