

MATERIAL SAFETY DATA SHEET

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

1.1 Product Identifier					
Product Name		Petitgrain oil			
Biological Definition		The volatile oil obtained by steam distillation of the branches, twigs and leaves of an acclimatised variety of the Bitter Orange Tree <i>Citrus aurantium L. subsp. aurantium</i>			
INCI Name		Citrus Aurantium Amara Leaf/Twig Oil.			
Synonyms & Trade Names		Petitgrain oil			
CAS-No	68916-04-1 / 72968-50-4	EC No.	277-143-2	EINECS No.	277-143-2
1.2 Relative identified uses of the substance or mixture and uses advised against					
No additional data available.					
1.3 Details of the supplier of the safety data sheet					
NTM UK LTD, 69 Bethel Street, Norwich, Norfolk, United Kingdom NR2 1NR					
1.4 Emergency Tel. No.			+44(0)1603 610883		

02. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
The Full Text for all Hazard Statements is displayed in Section 16.	
Classification (EC 1272/2008)	
Physical and Chemical Hazards: Flam. Liq. 3 - H226. Human health: Skin Irrit. 2 - H315; Eye Dam. 1 - H318; Skin Sens. 1 – Environment: Aquatic Acute 2 - H401; Aquatic Chronic 2 - H411.	
2.2 Label Elements	
Label in accordance with (EC) No 1272/2008	
<p style="text-align: center;">GHS07 GHS09 GHS02 GHS05</p>	
Signal Word	Danger.
Contains	Beta Pinene, Geraniol, Limonene.
Hazard Statements	
H226 Flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H401 Toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.	

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash ... thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P302+352 IF ON SKIN: Wash with plenty of soap and water.
 P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P321 Specific treatment (see ... on this label).
 P332+313 If skin irritation occurs: Get medical advice/attention.
 P333+313 If skin irritation or rash occurs: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P363 Wash contaminated clothing before reuse.
 P370+378 In case of fire: Use ... for extinction.
 P391 Collect spillage.
 P403+235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container to ...P363 Wash contaminated clothing before reuse.

Supplementary Precautionary Statements

None

2.3 Other Hazards

PBT or vPvB according to Annex XIII	No additional data available.
Adverse physio-chemical properties	No additional data available.
Adverse effects on human health	No additional data available.

03. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures
30.0 – 60.0% Linalyl Acetate CAS: 115-95-7, EINECS: 204-116-4 Classification (EC 1272/2008) Skin Irrit. 2 - H315; Eye Irrit. 2 - H319
10.0 - 30.0% Linalool CAS-No.: 78-70-6 EC No.: 201-134-4 Classification (EC 1272/2008) Acute Tox. 5 - H303, Skin Irrit. 2 - H315, Aquatic Acute 3 - H402
5.0 - 10.0% a-terpineol (p-menth-1-en-8-ol) CAS-No.: 99-55-5 EC No.: 202-680-6 Classification (EC 1272/2008) Skin Irrit. 2 - H315, Eye Irrit. 2 - H319
1.0 - 5.0% Beta-pinene CAS-No.: 127-91-3 EC No.: 204-872-5 Classification (EC 1272/2008) Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317
1.0-5.0% Geraniol CAS-No.: 106-24-1 EC No.: 203-377-1 Classification (EC 1272/2008) Skin Irrit. 2 - H315, Eye Dam. 1 - H318, Skin Sens. 1 - H317
1.0-5.0% Geranyl Acetate CAS-No.: 105-87-3 EC No.: 203-341-5 Classification (EC 1272/2008) Aquatic Chronic 2 - H411
1.0 - 5.0% Limonene CAS-No.: 5989-27-5 EC No.: 227-813-5 Classification (EC 1272/2008) Flam. Liq. 3 - H226, Skin Irrit 2 - H315 Asp Tox. 1 - H304, Skin Sens. 1 - H317 Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410
1.0 - 5.0% Myrcene (7-methyl-3-methyleneocta-1,6-diene) CAS-No.: 123-35-3 EC No.: 204-622-5 Classification (EC 1272/2008) Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Asp. Tox. 1 - H304
<1.0% Alpha-pinene CAS-No.: 80-56-8 EC No.: 201-291-9 Classification (EC 1272/2008) Flam. Liq. 3 - H226, Skin Sens. 1 - H317, Asp. Tox. 1 - H304, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410
<1.0% Terpinolene CAS-No.: 586-62-9-5 EC No.: 209-578-0 Classification (EC 1272/2008) Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Aquatic Chronic 2 - H411

04. FIRST AID MEASURES

4.1	Description of first aid measures
Inhalation	Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist. Do not induce vomiting.
Skin Contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
Eye Contact	Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
4.2	Most important symptoms and effects, both acute and delayed No additional data available.
4.3	Indication of any immediate medical attention and special treatment needed No additional data available.

05. FIRE-FIGHTING MEASURES

5.1	Extinguishing Media
	Do not use a direct stream of water to extinguish. Use: Powder. Carbon dioxide (CO ₂).
5.2	Special hazards arising from the product
	Specific hazards: When heated and in case of fire, toxic vapours/gases may be formed.
5.3	Advice for firefighters
	Protective equipment for fire-fighters: Wear Self-contained breathing apparatus. Wear chemical protective clothing.


06. ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment and emergency procedures
	Wear protective clothing as described in Section 8 of this safety data sheet.
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.
	Absorb with inert, non-combustible, inorganic absorbent material, sweep up and remove to an approved disposal container. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking.
6.4	Reference to other sections
	No additional data available.

07. HANDLING AND STORAGE

7.1	Precautions for safe handling
	Avoid spilling, skin and eye contact. Adopt best manual handling considerations when handling, carrying and dispensing.
7.2	Conditions for safe storage, including any incompatibilities
	Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Keep away from heat, sparks and open flame
7.3	Specific end use(s)
	No additional data available

08. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters	
Linalool (CAS: 78-70-6) Ingredient Comments : No exposure limits noted for ingredient.	
8.2 Exposure controls	
Protective Equipment	
	
Process Conditions	Safety shower and eye bath.
Engineering Measures	Provide adequate ventilation. Respiratory equipment. Self-contained breathing apparatus.
Respiratory Equipment	Protection not required if good ventilation is maintained. Use inhalation protection in poorly ventilated areas.
Hand Protection	Use suitable protective gloves if risk of skin contact.
Eye Protection	Wear approved safety goggles.
Other Protection	Wear rubber apron.
Hygiene Measures	Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
Personal Protection	Use personal protection according to Directive 89/686/EEC.
Skin Protection	Wear apron or protective clothing in case of splashes.
Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorised companies.

09. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Clear liquid
Colour	Pale yellow to yellow brown
Odour	Characteristic
Relative Density	0.882 to 0.893 @ 20°C
Flash Point (°C)	>66°C
Refractive Index	1.450 to 1.465 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	No additional data available.
Vapour Pressure	No additional data available.
Solubility in Water @20°C	Insoluble in water.
Auto-ignition temperature (°C)	No additional data available.

9.2 Other information	
No additional data available.	

10. STABILITY AND REACTIVITY

10. Reactivity 1	No additional data available.
10. Chemical stability 2	Stable under the recommended handling and storage conditions.
10. Possible hazardous reactions 3	No additional data available.
10. Conditions to Avoid 4	Avoid heat, sparks and open flames.
10. Incompatible materials 5	Materials To Avoid: Strong acids, alkali or oxidising agents.
10. Hazardous Decomposition Products	In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	There is no data available on this product. It must be considered and handled and should be dealt with the highest possible caution.
Skin corrosion / irritation	No additional data available.
Serious eye damage / irritation	No additional data available.
Respiratory or skin sensitisation	No additional data available.
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.
Photo-toxicity	No additional data available.
Other Information	No additional data available.


12. ECOLOGICAL INFORMATION

12.1 Toxicity	No additional data available.
12.2 Persistence & degradability	Degradability: No additional data available.
12.3 Bioaccumulation Potential	Bioaccumulative potential: No data available on bioaccumulation.
12.4 Mobility in soil	No additional data available.
12.5 Results of PBT and vPvB Assessment	No additional data available.
12.6 Other adverse effects	No additional data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Dispose of in compliance with all local and national regulations.

14. TRANSPORT INFORMATION

14.1 UN number	
UN No. Road	3082
UN No. SEA	3082
UN No. AIR	3082
14.2 UN proper shipping name	
ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S	
14.3 Transport hazard class(es)	
ADR/RID/ADN Class:	9 Miscellaneous dangerous substances and articles.
ICAO Class/Division:	9
IMDG Class:	9
Transport Labels	
	
14.4 Packing group	
IMDG Packing group	III
ICAO Packing group	III
14.5 Environmental hazards	
Environmentally Hazardous Substance/Marine Pollutant	
	
14.6 Special precautions for user	
EMS F-A-S-F	
Hazard No. (ADR) 9	
Hazard No. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances.	
Tunnel Restriction Code (E)	
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
	<p>Statutory Instruments The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Guidance Notes Workplace Exposure Limits EH40. CHIP for everyone HSG(108). EU Legislation 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.</p>
15.2	Chemical safety assessment
	No additional information available.

16. OTHER INFORMATION

Hazard and/or Precautionary Statements in Full	<p>H318 Causes serious eye damage. H319 Causes serious eye irritation. H315 Causes skin irritation. H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects. H401 Toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H400 Very toxic to aquatic life.</p>
Other Information	None.

DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.