





## MATERIAL SAFETY DATA SHEET

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

<b>1.1 Product Identifier</b>					
Product Name		Celery Seed Essential Oil			
Biological Definition		Apium Graveolens Seed Oil is an essential oil obtained from the seeds of the celery, Apium graveolens L., Umbelliferae.			
INCI Name		Illicium Verum Fruit Oil.			
Synonyms & Trade Names		Apium Graveolens Seed Oil			
CAS-No	89997-35-3	EC No.	289-668-4	EINECS No.	289-668-4
<b>1.2 Relative identified uses of the substance or mixture and uses advised against</b>					
No additional data available.					
<b>1.3 Details of the supplier of the safety data sheet</b>					
NTM UK LTD, 69 Bethel Street, Norwich, Norfolk, United Kingdom NR2 1NR					
<b>1.4 Emergency Tel. No.</b>			+44(0)1603 610883		

### 02. HAZARDS IDENTIFICATION

<b>2.1 Classification of the substance or mixture</b>					
The Full Text for all Hazard Statements is displayed in Section 16.					
Classification (EC 1272/2008)					
Physical and Chemical Hazards: Flammable liquids Category 3 Human health: Acute Tox. 5 - H303; Skin Irrit. 2 - H316; Skin Sens. 1 - H317; Muta. 1 - H341; Carc. Environment: Aquatic Category 1 long-term hazard					
<b>2.2 Label Elements</b>					
Label in accordance with (EC) No 1272/2008					
GHS08	GHS07	GHS02	GHS09		
					
Signal Word			Danger.		
Contains			Limonene, butylidene phthalide, sedanolide, sedanoic acid		
<b>Hazard Statements</b>					
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/hot surfaces. — No smoking.  
 P273: Avoid release to the environment.  
 P280: Wear protective gloves/eye protection/face protection.  
 P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
 P331: Do NOT induce vomiting.

## Supplementary Precautionary Statements

P391 Collect spillage.

## 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

**<74.0% 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

**<3.0% Butylidene phthalide** CAS: 551-08-6, EC: 208-991-3  
 Classification (EC 1272/2008) Acute Tox. 4 - H30

## 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	<b>Most important symptoms and effects, both acute and delayed</b> No additional data available.
4.3	<b>Indication of any immediate medical attention and special treatment needed</b> No additional data available.

## 05. FIRE-FIGHTING MEASURES

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


## 06. ACCIDENTAL RELEASE MEASURES

<b>6.1</b>	<b>Personal precautions, protective equipment and emergency procedures</b>
	Wear protective clothing as described in Section 8 of this safety data sheet.
<b>6.2</b>	<b>Environmental Precautions</b>
	Do not discharge into drains, water courses or onto the ground.
<b>6.3</b>	<b>Methods and material for containment and cleaning up.</b>
	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.
<b>6.4</b>	<b>Reference to other sections</b>
	No additional data available.

## 07. HANDLING AND STORAGE

<b>7.1</b>	<b>Precautions for safe handling</b>
	Avoid spilling, skin and eye contact. Adopt best manual handling considerations when handling, carrying and dispensing.
<b>7.2</b>	<b>Conditions for safe storage, including any incompatibilities</b>
	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
<b>7.3</b>	<b>Specific end use(s)</b>
	No additional data available

## 08. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>8.1</b>	<b>Control parameters</b>
	Linalool (CAS: 78-70-6) Ingredient Comments : No exposure limits noted for ingredient.
<b>8.2</b>	<b>Exposure controls</b>
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

<b>9.1 Information on basic physical and chemical properties</b>	
Appearance	Viscous liquid.
Colour	Pale yellow to yellow-brown.
Odour	Characteristic.
Relative Density	0.846 to 0.910 @ 20°C
Flash Point (°C)	55°C
Refractive Index	1.458 to 1.490@ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	183 @ 760 mm Hg.
Vapour Pressure	No additional data available.
Solubility in Water @20°C	4.58 mg/L @ 25°C (est.).
Auto-ignition temperature (°C)	Product is not self-igniting.

<b>9.2 Other information</b>	
No additional data available.	

## 10. STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	No additional data available.
<b>10.2 Chemical stability</b>	Stable under the recommended handling and storage conditions.
<b>10.3 Possible hazardous reactions</b>	No additional data available.
<b>10.4 Conditions to Avoid</b>	Avoid storage temperatures above 25°C.
<b>10.5 Incompatible materials</b>	Materials To Avoid: Strong acids, alkali or oxidising agents.
<b>10.6 Hazardous Decomposition Products</b>	In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

## 11. TOXOLOGICAL INFORMATION

<b>11.1 Information on toxicological effects</b>	
Acute Toxicity	Acute oral toxicity: orl-rat LD50 > 5000 mg/kg Food & Cosmetics Toxicology. 12, 849. (1974). Dermal toxicity skn-rbt LD50 > 5000 mg/kg Food and Cosmetics Toxicology 12, 849 (1974).
Skin corrosion / irritation	Category 2 according to UN-GHS & EU-CLP following EC 1272/2008.
Serious eye damage / irritation	Not categorised under EC 1272/2008 but potential exists – wear eye goggles/face protection whilst handling.
Respiratory or skin sensitisation	Category 1 according to UN-GHS & EU-CLP following EC 1272/2008. An allergic reaction to the essential oil in celery plant workers has been noted Palumbo JF et al (1953). J Am Pharm Assn. 42(1):57
Germ Cell Mutagenicity	Phthalides present in celery seed oil (sedanolide, sadenenolide, sedanoic anhydride and 3-n-butylphthalide are reported to have some mutagenic activity (Shibamoto & Bjeldanes (1993).
Carcinogenicity	No additional data available.
Reproductive toxicity	Celery seed oil not recommended for pregnant women by some authorities but firm evidence of toxicological effects is difficult to find
STOT-single exposure	No additional data available.
STOT-repeated exposure	No additional data available.
Photo-toxicity	Category 1 according to UN-GHS & EU-CLP following EC 1272/2008
Other Information	No additional data available.

## 12. ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>	Very toxic to aquatic life with long term adverse effects
<b>12.2 Persistence &amp; degradability</b>	Degradability: No additional data available.
<b>12.3 Bioaccumulation Potential</b>	Bioaccumulative potential: No data available on bioaccumulation.
<b>12.4 Mobility in soil</b>	No additional data available.
<b>12.5 Results of PBT and vPvB Assessment</b>	No additional data available.
<b>12.6 Other adverse effects</b>	No additional data available.

## 13. DISPOSAL CONSIDERATIONS

<b>13.1 Waste treatment methods</b>	Dispose of in compliance with all local and national regulations.
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## 14. TRANSPORT INFORMATION

<b>14.1 UN number</b>	
UN No. Road	1169
UN No. SEA	1169
UN No. AIR	1169
<b>14.2 UN proper shipping name</b>	
EXTRACTS, AROMATIC, LIQUID	
<b>14.3 Transport hazard class(es)</b>	
ADR/RID/ADN Class:	3
ICAO Class/Division:	3
IMDG Class:	3
Transport Labels	
<b>14.4 Packing group</b>	
IMDG Packing group	III
ICAO Packing group	III
<b>14.5 Environmental hazards</b>	
<b>14.6 Special precautions for user</b>	
EMS F-E,S-D	
Hazard No. 3Z	
Hazard No. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances.	
Tunnel Restriction Code (E)	
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code</b>	
No additional data available.	

## 15. REGULATORY INFORMATION

<b>15.1</b>	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>
	<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>
<b>15.2</b>	<b>Chemical safety assessment</b>
	No additional information available.

## 16. OTHER INFORMATION

Hazard and/or Precautionary Statements in Full	<p>H226: Flammable liquid and vapour. H302: Harmful if swallowed. H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H316: Causes mild skin irritation. H317: May cause an allergic skin reaction. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.</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.